PCM-2800

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model

Model Name Using Similar Mechanism	PCM-2600
Tape Transport Mechanism Type	DATM-56

SPECIFICATIONS

Recording section

Tape	Digital audio tape
Recording head	Rotary head
Recording time	Standard: 120 minutes Long-play: 240 minutes (DT-120)
Tape speed	Standard: 8.15 mm/s Long-play: 4.075 mm/s
Drum rotation	Standard: 2,000 rpm Long-play: 1,000 rpm
Error correction	Double-encoded Reed Solomon code

Tape section

Track pitch	13.6 µm (20.4 µm)
Sampling frequency	48 kHz, 44.1 kHz, 32 kHz
Modulation system	8-10 modulation
Transfer rate	2.46 Mbit / sec
Number of channels	2 channels, stereo
D / A conversion (quantization)	Standard: 16-bit linear Long-play: 12-bit non-linear

General section

Power requirements

Where purchased	Power requirements
US, Canadian model	120 V AC, 60 Hz
AEP, UK, German model	220 - 240 V AC, 50/60 Hz

Power consumption	35W (US, Canadian model) 37W (AEP, UK, German model)
Dimensions	Approx 430 × 125 × 350 mm (w/h/d) (17 × 5 × 13 7/8 inches) (not including rack mount adaptor)
Weight	Approx 6.3kg (13 lb 14 oz)

Remote commander RM-D868 (supplied)

Remote control system	Infrared control
Power requirements	3V DC, with two size-AA (R6) batteries
Dimensions	Approx 45 × 185 × 20 mm (w/h/d) (1 13/16 × 7 3/8 × 13/16 inches)
Weight	Approx 100g (3.5 oz) incl. batteries

Supplied accessories

- AC power cord (1)
- Remote commander (remote) RM-D868 (1)
- Size-AA (R6) batteries (2)
- Rack mount adaptors (2)
- Screws (M5 × 12) (4)
- Decorative washers (4)
- Decorative panel (1)
- Tapping screws (3 × 8) (2)
- Operating instructions (1)
- Warranty card (1) (US, Canadian model)

—Continued on next page—

DIGITAL AUDIO TAPE DECK

SONY®

Input Connectors

Analog Input

Connector	Type	Input impedance	Rated input level*
LINE	XLR-3 (FEMALE)	Approx 10 kilohms (balanced)	+4 dBs (factory setting)

Digital Input

Connector	Type	Input impedance	Rated input level
COAXIAL	Pin-plug jack	75 ohms	0.5 Vp-p
AES/EBU	XLR-3 (FEMALE)	110 ohms (balanced)	—

Output Connectors

Analog Output

Connector	Type	Output impedance	Rated output level*	Load impedance
LINE	XLR-3 (MALE)	Approx 150 ohms (balanced)	+4 dBs (factory setting)	10 kilohms
HEADPHONES	Stereo phone-plug jack	100 ohms	0.18 mW	32 ohms

Digital Output

Connector	Type	Output impedance	Rated output level	Load impedance
COAXIAL	Pin-plug jack	75 ohms	0.5 Vp-p	75 ohms
AES/EBU	XLR-3 (MALE)	20 ohms (balanced)	—	110 ohms

Variable range of analog (LINE) input/output reference level*
+4 dBs - –12 dBs

Maximum analog (LINE) output level
+24 dBs

Remote switch connectors DIN connector, (8-pin) parallel

Audio characteristics

Frequency response**
Standard: 20 - 20,000 Hz (±0.5 dB)
Long-play: 20 - 14,500 Hz (±0.5 dB)

Signal-to-noise ratio**
90 dB or more (20 kHz-LPF, A-Weight filter ON)

Total harmonic distortion**
Standard: 0.05% or less (at 1 kHz reference level*, 20 kHz-LPF ON)
Long-play: 0.3% or less (at 1 kHz reference level*, 20 kHz-LPF ON)

Wow and flutter
Below measurable limit (±0.001% W.PEAK)

* The reference level corresponds to –20 dB on the peak level meters.
** During analog input with the SBM function off

Design and specifications are subject to change without notice.

Flexible Circuit Board Repairing

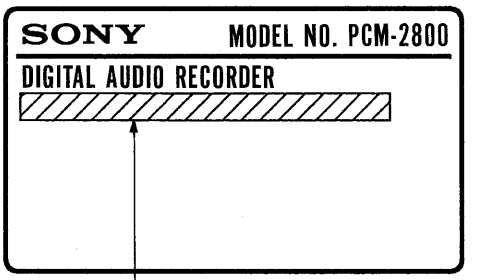
- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

MODEL IDENTIFICATION

—Model Number label (Carved on Back Panel)—



US, Canadian model : AC 120V 60Hz 35W
AEP, UK, German model : AC 220—240V~50/60Hz 37W

CAUTION

Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type recommended by the equipment manufacturer.
Discard used batteries according to manufacture's instructions.

ADVARSEL!

Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering.
Udskiftning må kun ske med batteri
af samme fabrikat og type.
Lever det brugte batteri tilbage til leverandøren.

ADVARSEL

Eksplosjonsfare ved feilaktig skifte av batteri.
Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten.
Brukte batterier kasseres i henhold til fabrikantens instruksjoner.

VARNING

Explosionsfara vid felaktigt batteribyte.
Använd samma batterityp eller en likvärdig typ som rekommenderas av apparattillverkaren.
Kassera använt batteri enligt gällande föreskrifter.

VAROITUS

Paristo voi räjähtää, jos se on virheellisesti asennettu.
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer :

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers.).

Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

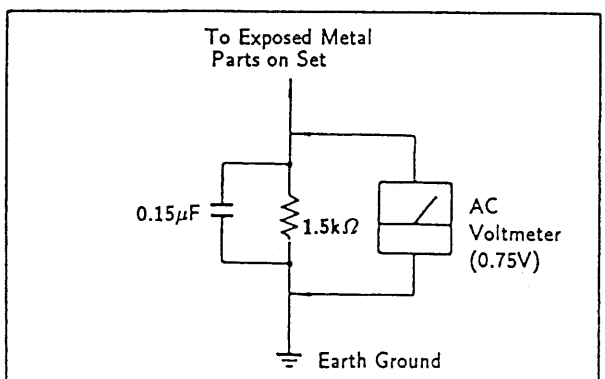


Fig. A. Using an AC voltmeter to check AC leakage.

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SAFETY-RELATED COMPONENT WARNING!!

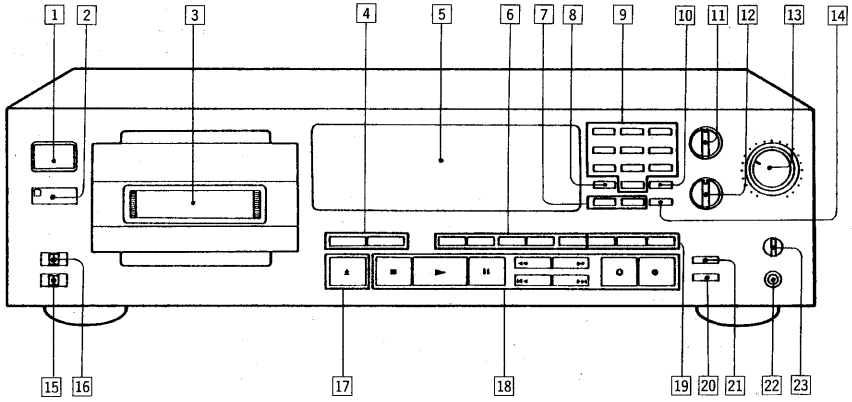
COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

IDENTIFYING THE PARTS

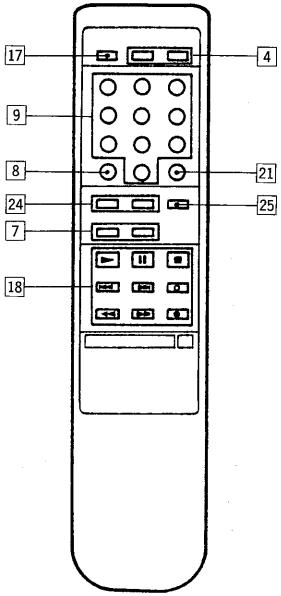
—Main Section—



1 POWER switch
2 Remote control sensor
3 Cassette holder
4 COUNTER buttons
MODE button
RESET button
5 Display window
6 START ID buttons
AUTO button
RENUMBER button
REHEARSAL button
WRITE button
ERASE button
7 DATE buttons
RECORDED button
PRESENT button
8 CLEAR button
9 Number buttons (0 to 9)
10 SKIP PLAY button
11 INPUT select switch
ANALOG
DIGITAL
12 REC MODE select switch
STANDARD 48k
STANDARD 44.1k
LONG
13 REC (recording) LEVEL control
14 CLOCK SET button
15 SBM (super bit mapping) switch
16 REMOTE switch
17 ⏏ OPEN/CLOSE button
18 Tape operation buttons
■ STOP button
▶ PLAY button
▮▮ PAUSE button
◀◀ REW (rewind) button
▶▶ FF (fast-forward) button
▮◀◀ PREVIOUS AMS* button
▶▶▮ NEXT AMS* button
O REC MUTE (record muting) button
● REC (recording) button
19 SKIP ID buttons
REHEARSAL button
WRITE button
ERASE button
20 MARGIN RESET button
21 INPUT MONITOR button
22 PHONES (stereo phone) jack
23 PHONE (headphones) LEVEL control
24 RMS buttons
CHECK button
ENTER button
25 M.SCAN button

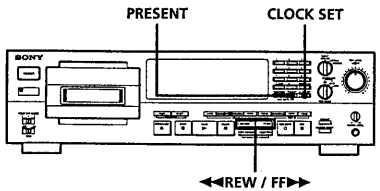
* AMS is an abbreviation for Automatic Music Sensor.

—Remote Commander Section (RM-D868)—



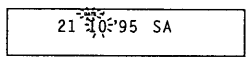
Setting the Clock

Your deck has a built-in clock to keep track of the current date and time. Once you set the date and time, this information will be recorded on the tape along with the audio signal during recording, allowing you to check the recording date of the tape during playback at a later time.



1 With the unit stopped, press CLOCK SET.
The year indication begins to flash.

2 Press ◀◀ REW or FF ▶▶ to decrease or increase the displayed year, then press CLOCK SET.
The year indication stops flashing and the month indication begins to flash.



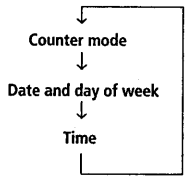
3 Repeat step 2 until all items have been set.
After setting the seconds, press CLOCK SET to start the clock.

The day of the week is displayed as follows:
Sunday: "SU", Monday: "MO", Tuesday: "TU", Wednesday: "WE", Thursday: "TH", Friday: "FR", Saturday: "SA".

Time display
- US, Canadian Model
  Time is displayed in a 12-hour format with midnight and noon indicated as follows:
  Midnight: 12:00 AM
  Noon: 12:00 PM
- AEP, UK, German Model
  Time is displayed in a 24-hour format with midnight and noon indicated as follows:
  Midnight: 0:00
  Noon: 12:00

To display the date or time

Press PRESENT.
Each time you press the PRESENT button, the display changes in the following order:



Adjusting the clock

1 Press CLOCK SET repeatedly until the item you want to change begins to flash.

2 Press ◀◀ REW or FF ▶▶ to decrease or increase the displayed item.

3 Press CLOCK SET repeatedly until the seconds begin to flash, then press CLOCK SET again.
The clock starts.

For more accurate time recordings
Adjust the clock once a week.

Notes
- When you first set the clock after unpacking the deck, "– – ' – – " will appear when you press the CLOCK SET button. This is normal. Set the clock according to the procedures above.
- Your deck uses a back-up battery to keep the clock running when the power is turned off. The life of the battery under normal use is approximately seven years. When the battery starts to run down, the clock will stop operating normally. When this occurs, have the battery replaced (for a fee) at your dealer or nearest Sony Service Center .

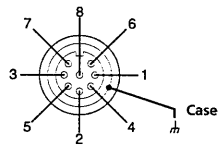
Remote Control Function Using a Wired Remote Switch

You can operate the deck remotely with a switch box connected to the REMOTE connector on the rear panel.

Using the REMOTE connector

When you want to operate the deck with a wired remote switch, set the REMOTE switch on the front panel to WIRED.
The pin numbers and pin assignments for the REMOTE connector on the rear panel are as follows:

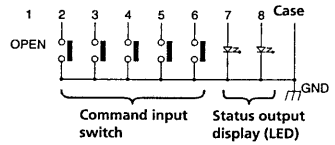
DIN connector (8 pin)



	Pin No	MODE1 (playback)	MODE2 (recording)
Inputs	1	H-level constant	L-level constant
	2	H-STOP/L-PLAY	L-STOP
	3	L-STOP	L-START ID WRITE
	4	L-PLAY	L-PLAY
	5	L-REW	L-PAUSE
	6	L-FF	L-REC
Status output	7	H-STOP	H-REC-PAUSE
	8	H-PLAY	H-REC
Case		GND	GND

Command inputs — H: OPEN (off impedance: 30 kilohms or more)
L: GND short (on impedance: 100 ohms or less)
Status output — H: approx 2V (I=15mA)
L: OPEN (High impedance)

Connection diagram (MODE 1)



Notes
- When using MODE 2, use pin number 1 for GND.
- By keeping the input to pin number 1 constant at either H-level or L-level determines whether pin numbers 2 to 8 are in MODE 1 (playback) or MODE 2 (recording).
- In MODE 1, pin number 2 may be used for fader-start function.
- For pin numbers 2 to 6 pin, input to smaller numbers take priority.
- Anti-chattering measures should be taken for the command input switches.
- Status output (pin numbers 7 and 8) is specially provided for driving a single LED. If more current is needed, use an additional drive circuit or electric power supply.
- Do not switch input to pin number 1 (MODE 1 and MODE 2) while the deck is playing or recording. This may result in mis-operation of the deck.

Digital Interface

Digital Input and Output Connectors

- The following table shows signal formats that correspond to the input and output connectors on the unit.
- The COAXIAL input connector accepts not only the consumer version of the IEC-958 international digital audio interface standard, but also the broadcasting studio version of the IEC-958 standard used by such DAT decks as the PCM-2300, PCM-2700 or PCM-2700A.

Type	Input connector	Output connector
AES/EBU	AES/EBU format	AES/EBU format
COAXIAL	IEC-958 for consumer use	IEC-958 for consumer use
	IEC-958 for broadcasting studio use	

Copy Information During Recording

- Copy information that is recorded on tape during recording varies according to the input connector used and the signal format, as shown in the table below.
- In the case of AES/EBU and the IEC-958 for broadcasting studio use, the digital signal carries no copy information.
- As for the IEC-958 for consumer use, three types of copy information exists: copying possible, first-generation copy permitted, and copying prohibited (Serial Copy Management System).

Input connector	Signal format	Copy information carried by digital signal	Recording capability on this unit	Copy information recorded on tape
AES/EBU	AES/EBU	None	Possible	Permitted (ID 6 : 00)
COAXIAL	IEC-958 for broadcasting studio use	None	Possible	Permitted (ID 6 : 00)
		Permitted	Possible	Permitted (ID 6 : 00)
	IEC-958 for consumer use	First-generation only	Possible	Prohibited (ID 6 : 10)
		Prohibited	Possible	Prohibited (ID 6 : 10)
ANALOG (LINE)	—	—	Possible	Permitted (ID 6 : 00)

Writing of Start IDs Automatically During Recording

- When "AUTO" appears in the display during recording, the writing of start IDs automatically takes place according to the input connector used and the signal format, as shown in the table below.
- In the case of ICE-958 for consumer use, the condition for the automatic writing of start IDs differs according to the category code in the digital signal.

O: automatic writing possible
×: automatic writing prohibited

Input signal	Signal format (Category code)		Automatic writing according to: audio input level [a]	DAT start ID [b]	CD track information
AES/EBU	AES/EBU		O	O [c]	×
COAXIAL	IEC-958 for broadcasting studio use		O	O [d]	×
	IEC-958 for consumer use	(DAT)	×	O	×
		(CD)	×	×	O [e]
		(Other)	O	×	×
ANALOG (LINE)	—		O	×	×

[a] If the input level remains under minus 50 dB (about minus 45 dB in case of ANALOG (LINE)) for 3 seconds or more, the deck writes a start ID when the input level rises above that level.
[b] DAT skip IDs are automatically written in the same way.
[c] Only when both units are PCM-2600s or PCM-2800s.
[d] Only when the PCM-2600 or PCM-2800 is connected to the PCM-2300, PCM-2700, or PCM-2700A.
[e] Some CD players do not output track information in the digital signal.

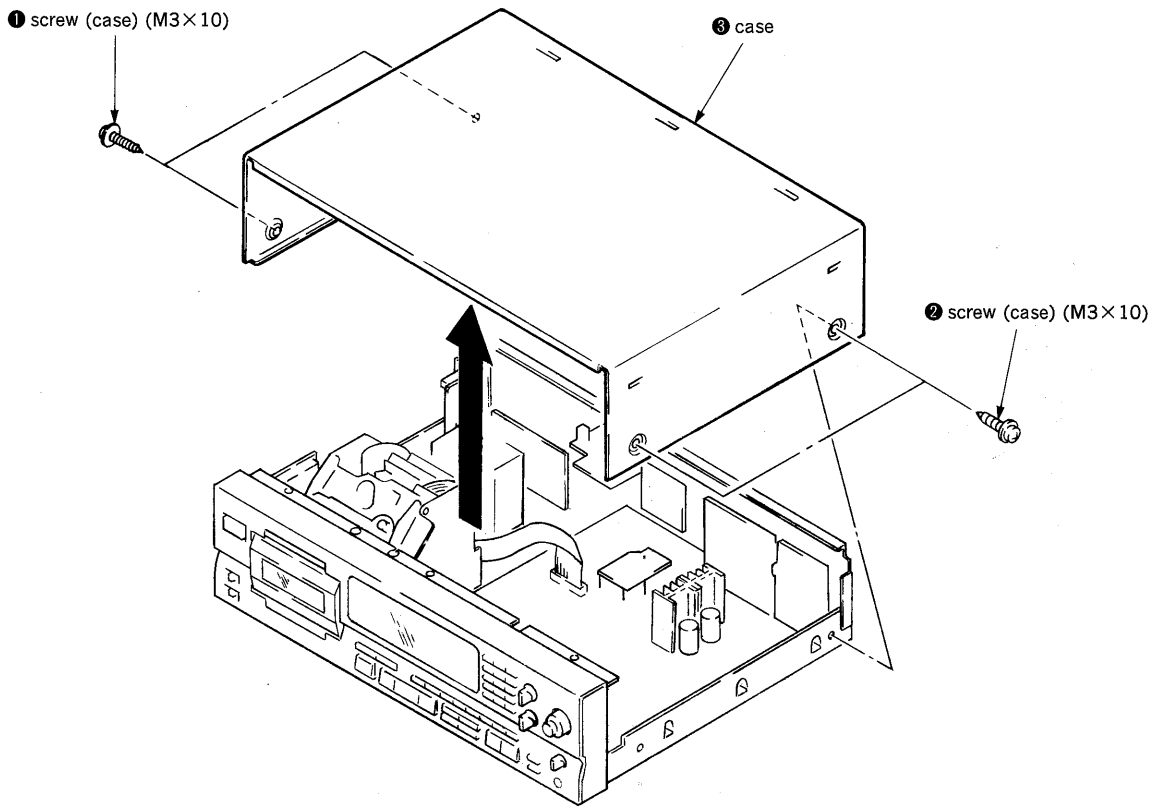
Digital Signal Lock Range

- The lock range of a digital signal (signal reception range) is about ±0.1% for a sampling frequency of 48 kHz, 44.1 kHz, or 32 kHz. Variable pitch signals are not receivable.
- When the digital input sampling frequency information does not match the actual sampling frequency, it is possible to record that signal if you change the REC MODE switch on the front panel to the actual sampling frequency of the signal.

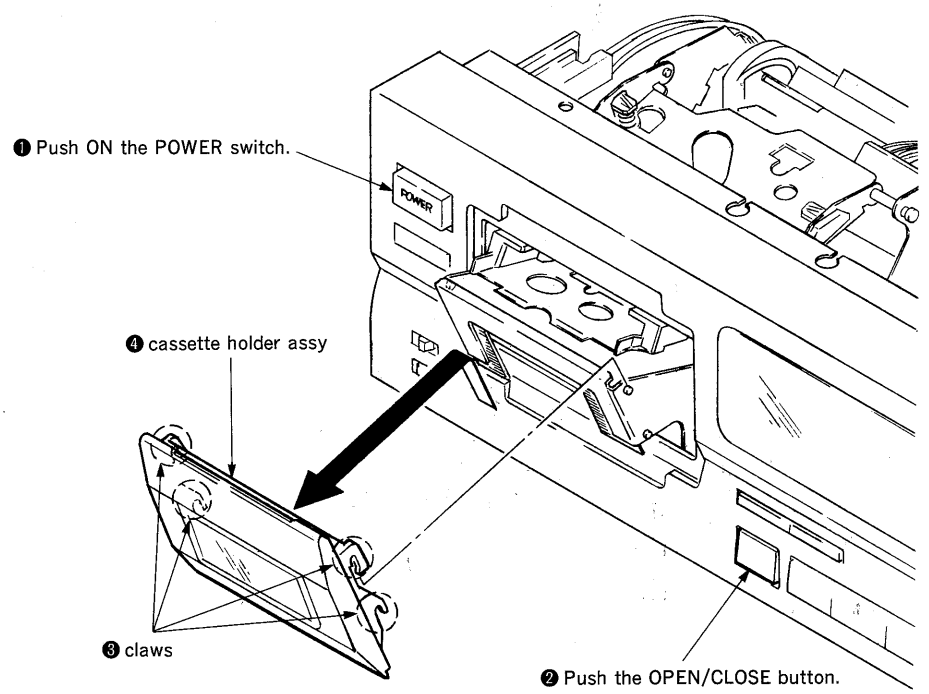
SECTION 2
DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

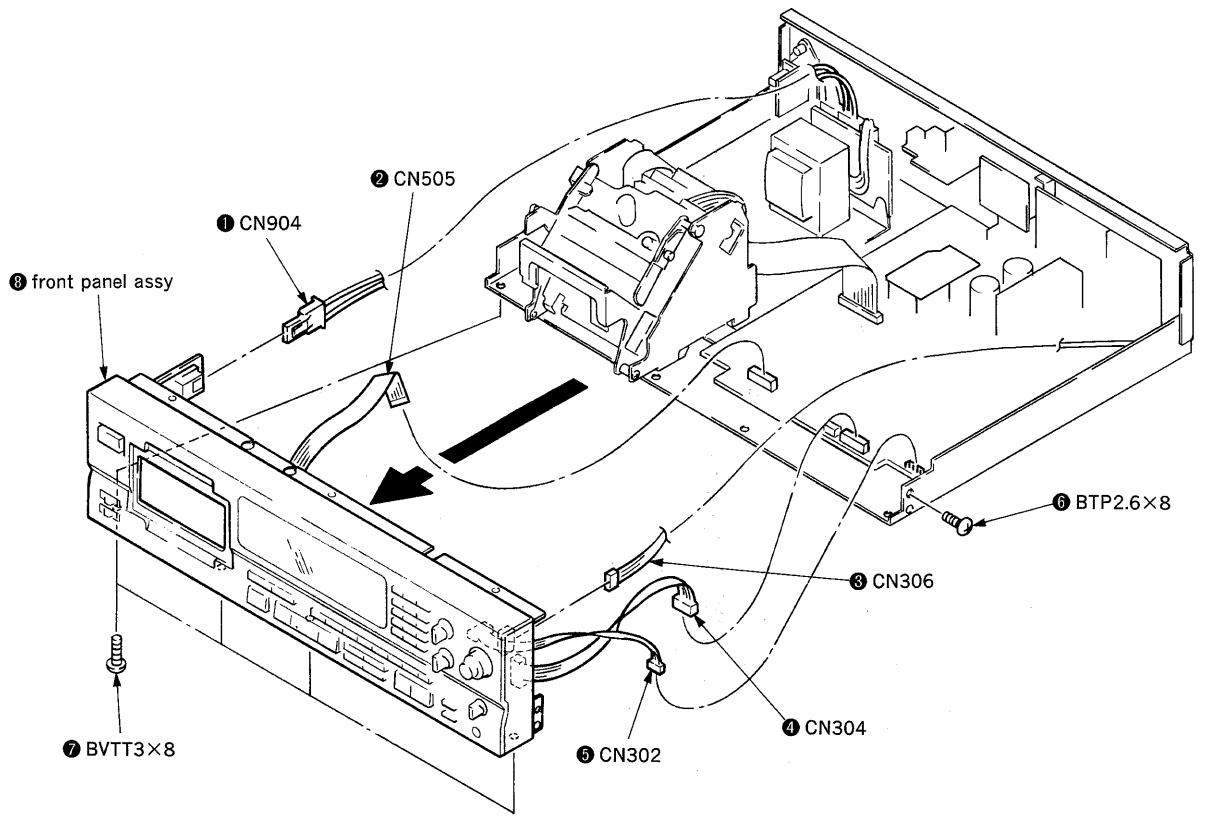
2-1. CASE



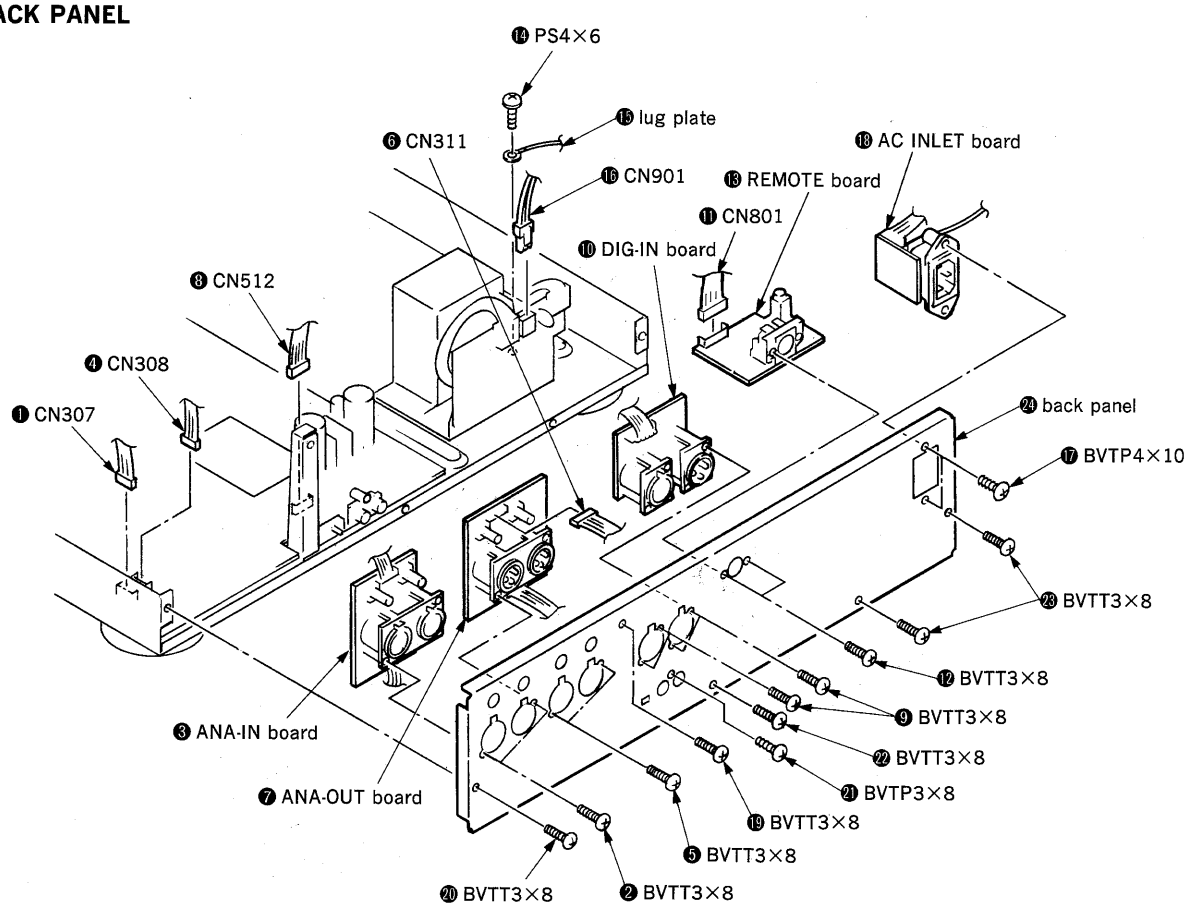
2-2. CASSETTE HOLDER ASSY



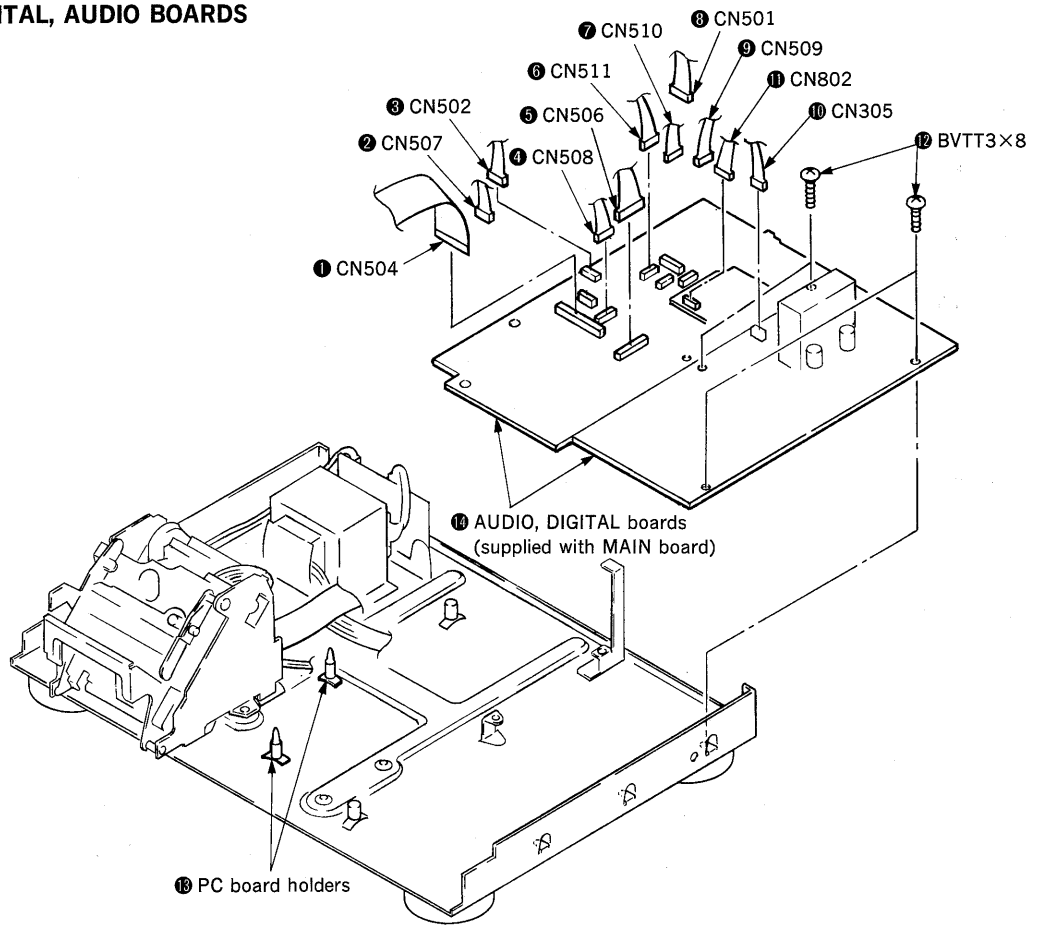
2-3. FRONT PANEL ASSY



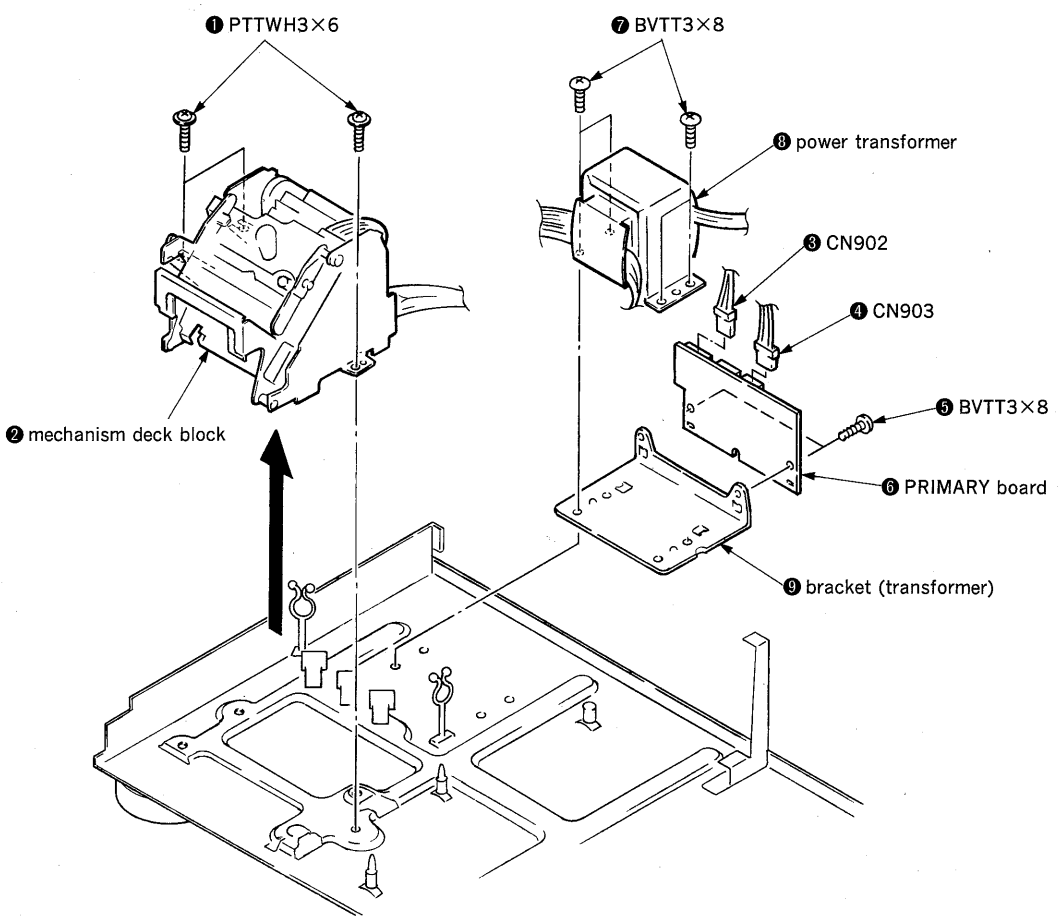
2-4. BACK PANEL



2-5. DIGITAL, AUDIO BOARDS



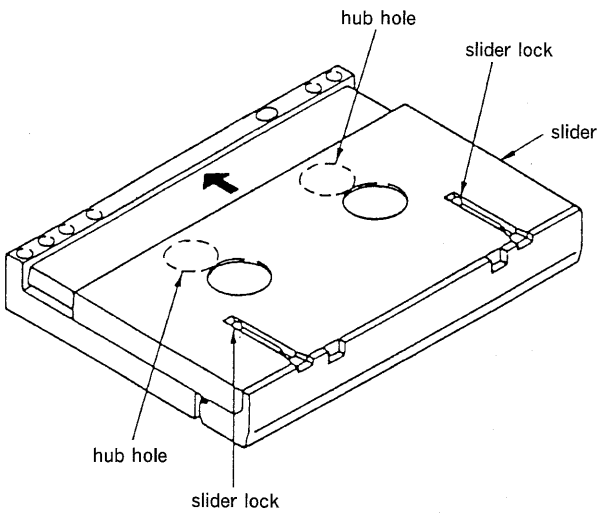
2-6. MECHANISM DECK BLOCK, POWER TRANSFORMER



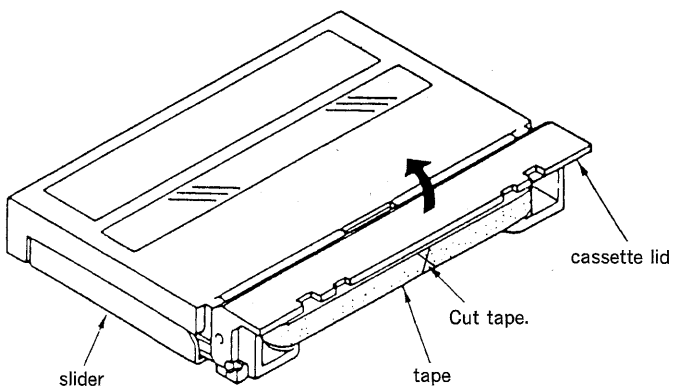
SECTION 3
ADJUSTMENTS

PRECAUTION

1. The adjustments are performed in the sequence that they are described.
2. The required test tapes are :
   TY-7111 (8-909-812-00) ·····Level
   TY-7252 (8-909-822-00) ·····Tracking
   TY-7551 (8-909-814-00) ·····Function
   TY-30B (8-892-358-00) ·····Blank
   The required torque meter is :
   TW-7131 (8-909-708-71) ·····FWD
3. Switch and Control Settings
   REMOTE switch : OFF
   REC MODE switch : 48k (STANDARD)
   REC LEVEL control : Minimum
   PHONE LEVEL control : Minimum
4. Preparation of End Sensor Cassette
   (1) Push the slider locks of a cassette tape and slide the slider in the direction of the arrow.



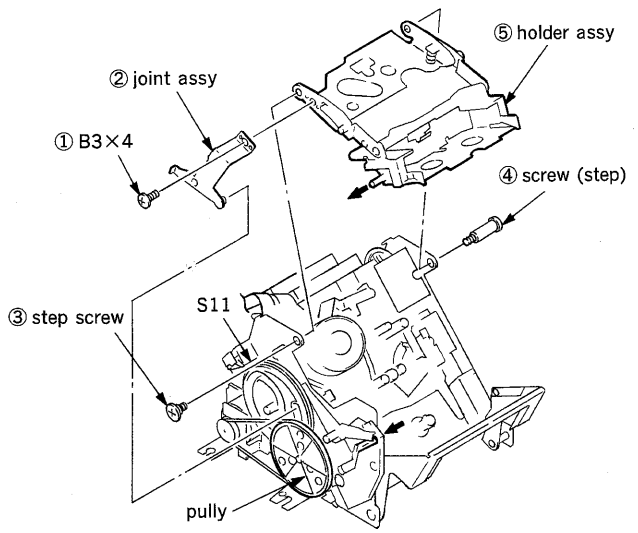
   (2) Open the cassette lid and cut tape.



   (3) Turn the hubs to take-up tape (for both T and S sides).

   The end sensor cassette tape for end sensor adjustment is now prepared.
5. Take care never to turn RV1 to RV4 within the RF AMP board of the cassette compartment section.
6. When adjusting tape pass and each guide, as shown below, it is a good practice to remove the holder assy and use the DAT cassette holder (J-8000-002-A). This facilitates adjustment work.
   - When removing and installing the holder assy, turn the pulley counterclockwise and set loading OUT condition for easy removal and installation.
   - When adjusting, turn the pulley clockwise and turn on the CASSETTE COMPARTMENT LOCK switch (S11) to set loading IN condition. Then, set the test tape.

   Note : When installing, align the arrowed portions.



7. Test Mode
   - To enter the test mode, short between TP (MAIN-TEST) and the GND on the DIGITAL board, then turn on the power. The meter scale within the fluorescent indicator tube (FL701) will flash.
     Press the OPEN/CLOSE ▲ key and set the test tape. (The specified tape should be used for each adjustment.)

     Test Mode (Short between TP (MAIN-TEST) and GND)
     ①Have "DPG" display lit in the fluorescent indicator tube.
     (Press the AMS ▶▶▌ key.)
     - S2, T2 and F Guide Adjustments
     - End Sensor Adjustment
     - Tape Pass Fine Adjustment (×1.5FWD mode)
     - DPG Adjustment

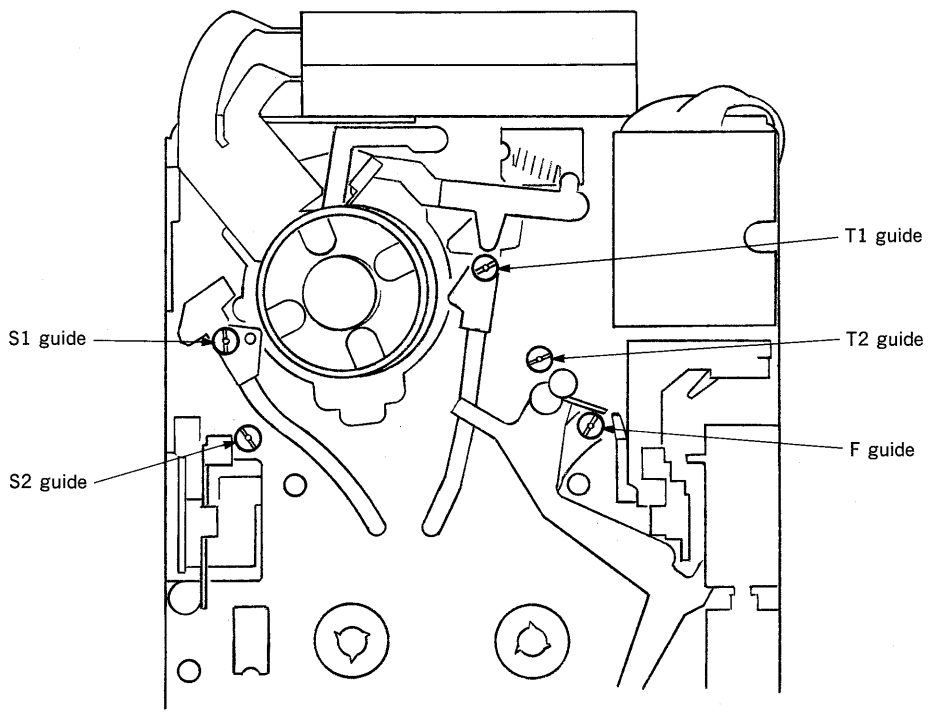
     ②Have "TR" display lit in the fluorescent indicator tube.
     (Press the ▶ key.)
     - FWD Torque Adjustment
     - FWD Back Tension Adjustment

     (Torque measurement mode)

   - To release the test mode, remove the short between TP (MAIN-TEST) and GND. After necessary adjustment is completed, be sure to release the test mode.

8. After adjustment is completed, perform the following checks to verify the tape speed.
   (1) Check that with the REC MODE switch set to STANDARD 48k, tape is normally recorded and played back. (×1)
   (2) Check that with the REC MODE switch set to LONG, tape is normally recorded and played back. (×0.5)
   (3) Check that in performing the CUE (▶ + ▶▶) or REVIEW (▶ + ◀◀) operation, "kyur kyur" sound is heard. (×3, ×8)
   (4) Check that after performing the FF (▶▶) or REW (◀◀) operation, the time display is appropriate. (×16)
   (5) Check that the AMS (▶▶▌, ▐◀◀) operation is normal.

Adjustment Location : mechanism deck block



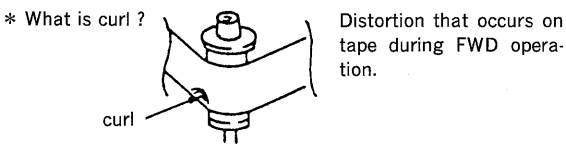
3-1. MECHANICAL ADJUSTMENTS

When replacing any drum related parts, after S2, T2 and F guide adjustments have been made, tape pass fine adjustment (×1.5FWD mode) in Electrical adjustement should be performed.

S2, T2 and F Guide Adjustements

Adjustment Method :

1. Enter the Test Mode ① (see page 10.) and set the test tape TY-7252 (8-909-822-00).
2. Set the REC MODE switch to STANDARD 48k and press the AMS ▶▶▌ key.
   While in FWD mode, check that there is no curl on the upper and lower flanges of the S2, T2 and F guides.
   If any curl is present, put the S2, T2 and F guide of concern back in the high position and adjust by adjusting the direction of tightening.



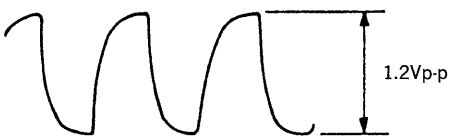
3-2. ELECTRICAL ADJUSTMENTS

End Sensor Adjustment

When removing the holder assy and when replacing the mechanism deck block, this adjustment should be performed.

Adjustment Method :

1. Connect the CH-1 terminal of an oscilloscope to TP (S-END) and the CH-2 terminal to TP (T-END) on the DIGITAL board.
2. Enter the Test Mode ① (see page 10.) and set the end sensor cassette tape (see page 10.).
3. Set the STOP (■) mode.
4. Adjust RV502 (S-END) and RV501 (T-END) on the DIGITAL board so that the respective peak to peak values of the waveforms on the oscilloscope are 1.2 Vp-p.



Adjustment Location : See page 14.

FWD Torque Adjustment

Adjustment Method :

1. Enter the Test Mode ② (Torque Measurement Mode) (see page 10.) and set the torque meter TW-7131 (8-909-708-71).
2. Press the PLAY (▶) key.
3. Press the ▶▶ key or ◀◀ key and adjust so that the FWD torque value (T side take-up torque) is within the range of 11 to 13 g•cm.
4. When the torque meter is circulating around, check the indicated value.

FWD Back Tension Adjustment

Adjustment Method :

1. Enter the Test Mode ② (Torque Measurement Mode) (see page 10.) and set the torque meter TW-7131 (8-909-708-71).
2. Press the PLAY (▶) key.
3. Press the AMS ▶▶▌ key or ▐◀◀ key and adjust so that the back tension (S side) is within the range of 8.5±0.5 g•cm.
4. When the torque meter is circulating around, check the indicated value.
5. Verify that the maximum value is less than 9.5 g•cm.

REV Torque Check and REV Back Tension Check

Check Method :

1. After FWD torque adjustment and FWD back tension adjustment are completed, press the PLAY (▶) key again and set REV (◀) mode.
2. Check that the REV torque value is within the range of 13.5 to 17.5 g•cm and that the REV back tension value is within the range of 7.5 to 11.5 g•cm.

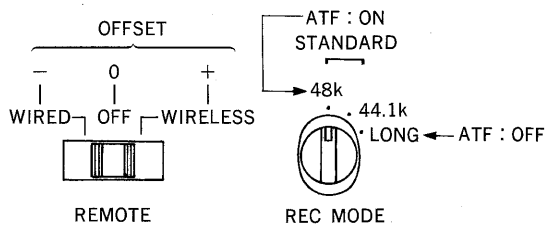
Tape Pass Fine Adjustment (×1.5FWD Mode)

When replacing any drum related parts, be sure to perform this adjustment.

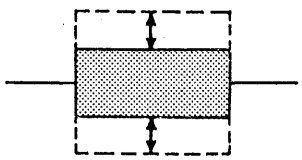
Adjustment Method :

1. Connect the CH-1 terminal of an oscilloscope to TP (RF) and the CH-2 terminal to TP (SWP) on the DIGITAL board.
2. Enter the Test Mode ① (see page 10.) and set the test tape TY-7252 (8-909-822-00).
3. Press the AMS (▶▶▌) key.

Role of each switch in test mode

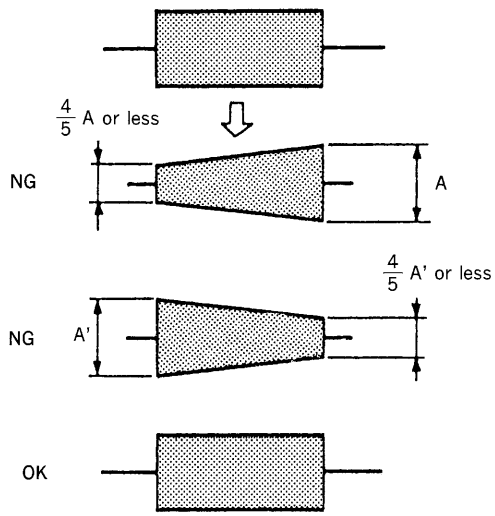


4. Put the REC MODE switch to the LONG (ATF : OFF) position and put the REMOTE switch to either the WIRED or WIRELESS position (OFFSET : − or +), fine adjust both the S1 guide and T1 guide so that the RF signal waveform of the oscilloscope repeatedly contracts and expands in vertical directions as it has the same shape.

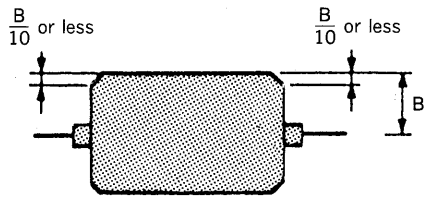


* Adjust the direction of tightening to complete this adjustment. If there is curl on any of the upper and lower flanges of the S2, T2 and F guides, adjust the guide of concern.

5. Put the REC MODE switch to the STANDARD 48k (ATF : ON) position and put the REMOTE switch to either the WIRED or WIRELESS position (OFFSET : − or +), then check the RF signal waveform.



6. Put the REC MODE switch to the STANDARD 48k (AFT : ON) position and put the REMOTE switch to the OFF position (OFFSET : 0), then check the RF signal waveform.
   (1) Verify that the peak value (B) of the RF signal waveform is 60mV or more.
   (2) Verify that the flat position of the RF signal waveform has undershoots of 10% or less.



7. If any of the specified values are not satisfied, repeat items 3 to 6.

Adjustment Location : See page 11.

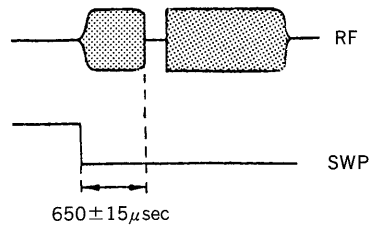
DPG Adjustment

When replacing any drum related parts, be sure to perform this adjustment.

Adjustment Method :

1. Connect the CH-1 terminal of an oscilloscope to TP (RF) and the CH-2 terminal to TP (SWP) on the DIGITAL board.
2. Enter the Test Mode ① (see page 10.) and set the test tape TY-7252 (8-909-822-00).
3. Put the REC MODE switch to the STANDARD 48k (ATF : ON) position and put the REMOTE switch to the OFF position (OFFSET : 0).
4. Press the AMS (▶▶▌) key.
5. Press the PLAY (▶) key.
6. "DPG OK" is displayed in the fluorescent indicator tube.

Check that there is a difference of 650±15 μsec between the oscilloscope's SWP signal and the RF signal.



Adjustment Location : See page 14.

CHECK AND REPLACEMENT FOR DATE FUNCTION

Clock IC Back-up Check

- When replacing the lithium battery (BATT501) or replacing any of the clock IC (IC518) and peripheral parts, the clock will be reset.
  (The DATE display will be 「'-- -- --」 「--$_h$--$_m$--$_s$」 even when the 「PRESENT」 button is pushed.)
  Perform the back-up check by the following procedure.
  (1) Connect a DC voltmeter between the DIGITAL board's TP (BATT+) as (+) side on the TP (BATT−) as (−) side.
  (2) With the POWER switch of the set OFF, check that the voltage (1) is less than +20mV.
  (If the measured value is more than +20mV, inspect the IC518 and peripheral parts and replace as needed.)
  (3) With the POWER switch of the set ON, check that the voltage (1) is less than 0mV (minus indication),
  (If plus indication, inspect the D510 and peripheral parts and replace as needed.)
  (4) When these voltages are normal, set the clock to the current date and time according to the instruction manual.
  (year/month/day/day of week/hours/minutes/seconds)*
  (5) After the clock is set in item (4), turn off the POWER switch once and in several seconds, turn on the power again and make sure that the clock is operating.

Adjustement Location : See page 14.

Replacement of Back-up Battery

The back-up battery for clock is designed to serve for more than seven years under normal service conditions (room temperature and ordinary humidity).

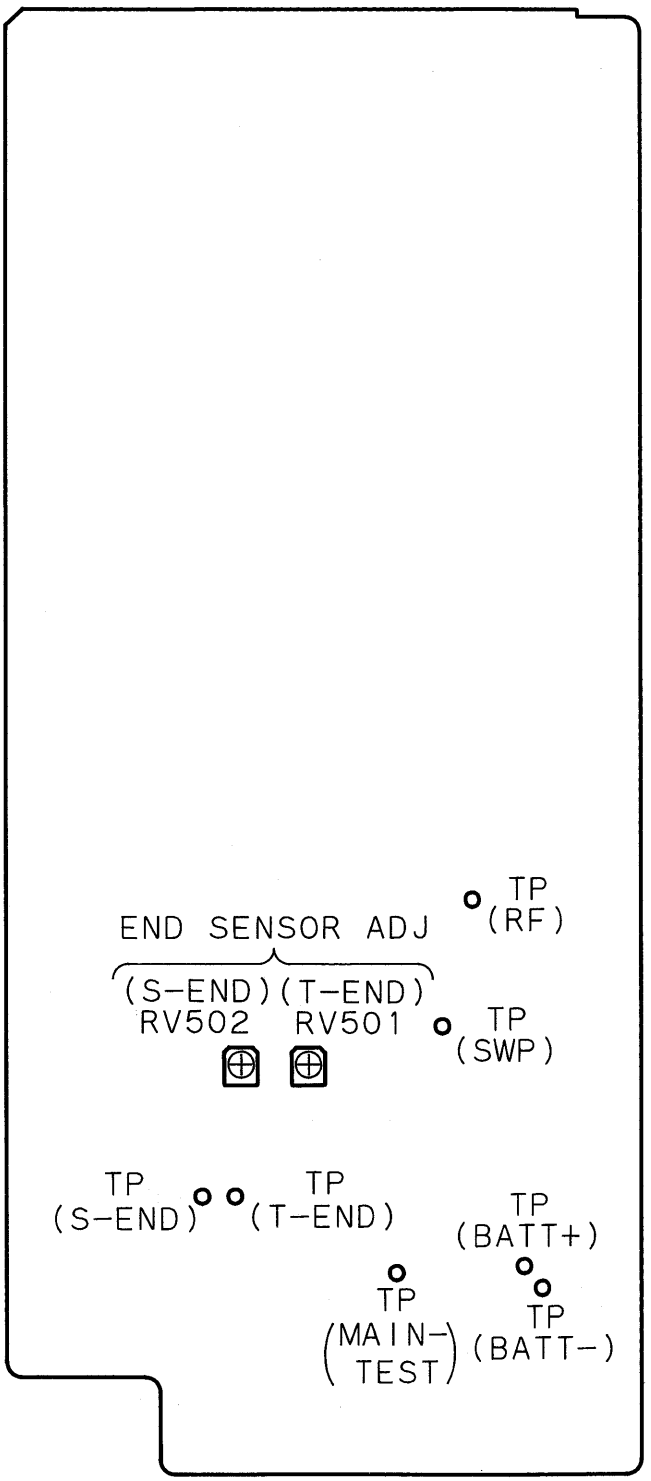
When replacing the battery, take note of the following:

- Perform the above "Clock IC Back-up Check" and remedy the cause of battery consumption.
- The open voltage of the battery as removed is 3.0V or more when it is new. If this voltage is 2.0V or less, then battery is fully consumed and needs to be replaced.
- After the battery is replaced, perform the "Clock IC Back-up Check" again and set the clock.
- The coin type lithium battery (CR2032) is used for replacement.

* For description of the clock setting, see page 5.

Adjustment and Check Locations:

—DIGITAL board (component side)—



SECTION 4
DIAGRAMS

4-1. IC PIN DESCRIPTIONS

• SBM+Digital Filter (IC308 CXD8482Q)

Pin No.	Pin Name	I/O	Pin Description
1	TEST	I	Test input pin. "H" for test mode and "L" for normal mode. (Fixed at "L" level in this set.)
2	NC	—	Empty pin
3	SYNC	I	Sync mode setting pin. "H" for INT master mode and "L" for EXT slave mode.
4	INIT	I	A/D converter power down mode input from main microcomputer (IC501). ("H" active) (This IC is set OFF in digital input/output mode.)
5	NC	—	Empty pin
6	CFLG	O	FE calibration flag output (Not used in this set, empty pin.)
7, 8	VDD	—	Power supply pin (+5V)
9	LRKI	I	L/R clock input (Not used in this set, fixed at "L" level.)
10	BKI	I	Beat clock input (Not used in this set, fixed at "L" level.)
11	NC	—	Empty pin
12	DLI	I	L channel data input (Not used in this set, fixed at "L" level.)
13	DRI	I	R channel data input (Not used in this set, fixed at "L" level.)
14	IFLG	O	FE sync flag output (Not used in this set, empty pin.)
15, 16	NC	—	Empty pin
17	FE	I	FE select input (Not used in this set, fixed at "L" level.)
18	AL2	I	Data signal (L) input (Not used in this set, fixed at "L" level.)
19	AR2	I	Data signal (R) input (Not used in this set, fixed at "L" level.)
20	AL1	I	Data signal (L) input from A/D converter (IC307).
21	AR1	I	Data signal (R) input from A/D converter (IC307).
22, 23	VSS	—	GND
24, 25	CVSS	—	GND
26	FCLK	O	Output of 128fs master clock for FE to A/D converter (IC307).
27	MCLK	I	Input of 256fs master clock from FS clock generator (IC325).
28	CVDD	—	Power supply pin (+5V)
29	NC	—	Empty pin
30	IBIT	I	64fs input data mode select input ("H" : 4bit, "L" : 1bit) (Fixed at "L" level in this set.)
31	NC	—	Empty pin
32	VSS	—	GND
33	SCALE	I	Scale select input ("H" : ×4, "L" : ×5) (Fixed at "L" level in this set.)
34	ISEL1	I	FS select of input data (Fixed at "L" level in this set.)
35	ISEL2	I	FS select of input data (Fixed at "L" level in this set.)
36	NC	—	Empty pin
37	DITH	I	Dither control input. Dither active when "H" and stopped when "L". (Not used in this set, empty pin.)
38	BOOST	I	Boost control input. Boost active when "H" and normal when "L". (Fixed at "H" level in this set.)
39	VDD	—	Power supply pin (+5V)
40	MODE	I	Serial data signal input from main microcomputer (IC501).
41	SHIFT	I	Shift clock signal input from main microcomputer (IC501). (Shift when ↓, latch when ↑)
42	LATCH	I	Latch pulse signal input from main microcomputer (IC501).
43	NC	—	Empty pin
44	LC	I	Low cut control input. "H" for low frequency cut and "L" for flat. (Fixed at "H" level in this set.)
45	SBM	I	Super Bit Mapping (SBM) control input from main microcomputer (IC501). ("H" : ON, "L" : OFF)

Pin No.	Pin Name	I/O	Pin Description
46	NC	—	Empty pin
47	OSEL	I	FS select of data output. ("H" : 2FS output or EX mode, "L" : FS output) (Fixed at "L" level in this set.)
48	OBIT	I	Bit select of data output. ("H" : 24 bits, "L" : 16 bits) (Fixed at "L" level in this set.)
49	DRO	O	Write clock output (Not used in this set, empty pin.)
50	DLO	O	L/R channel data signal output
51	NC	—	Empty pin
52, 53	VSS	—	GND
54	BCK	I	Bit clock input from digital filter (IC314).
55	NC	—	Empty pin
56	LRCK	I	L/R clock input from digital filter (IC314).
57	OFLG	O	Outside sync flag output (Not used in this set, empty pin.)
58	VDD	—	Power supply pin (+5V)
59	OVR	O	R channel side overflow flag output (Not used in this set, empty pin.)
60	OVL	O	L channel side overflow flag output (Not used in this set, empty pin.)

• Main Microcomputer (IC501 CXP87532-022Q)

Pin No.	Pin Name	I/O	Pin Description
1	SBM-ON	O	SBM (Super Bit Mapping) ON/OFF select pin ("L" : OFF, "H" : ON)
2	LCF-ON	O	Not used.
3	OBIT-SEL	O	Not used.
4, 5	—	—	Empty pin
6	PRE-EMPH	O	Not used.
7	AUSO	O	Digital filter control serial data output pin
8	AUSC	O	Digital filter control serial clock output pin
9	VCO-EN	O	DIGITAL IN REC mode only for "H" output.
10	XOPT/COA	O	Not used.
11	XADLD	O	A/D digital filter control latch output pin
12	XDALD	O	D/A digital filter control latch output pin
13	FADE-WE	O	Not used.
14	FADE-RST	O	Not used.
15	XANA/DIG	O	ANALOG/DIGITAL IN select output pin ("L" : ANALOG IN, "H" : DIGITAL IN)
16	XREC/PB	O	Record/playback select output pin ("L" : REC, "H" : PB)
17	XREPRO	O	Not used.
18	MIC-ATT	O	Not used.
19	MIC-ON	O	Not used.
20	RTC-DT	I/O	Clock IC serial data input/output pin
21	RTC-SC	O	Clock IC serial data output pin
22	RTC-CE	O	Clock IC chip enable output pin
23—27	—	—	Empty pin
28	FS48	O	Fs select output pin
29	FS44	O	
30	FS32	O	
31	XLM	O	Line mute output pin ("L" : ON, "H" : OFF)
32	—	—	Empty pin
33	SLV-MUT	O	Slave mute output pin
34	XSLV-SEL	O	Slave select output pin
35—38	AF3-AF0	I	Pull-up fixed.
39	MP	—	Connected to GND.
40	XRST	I/O	System reset input/output pin ("L" : ACTIVE)
41	VSS	—	GND
42	XTAL	O	Not used.
43	EXTAL	I	Operating clock input pin (9.408MHz)
44	XDISP-REQ	O	Pin for communication request output to display controller.
45	—	—	Not used.
46	XMECH-REQ	O	Pin for communication request output to mechanism microcomputer.
47	—	—	Not used.
48	XDISP-ACK	I	Pin for communication acknowledge input from display controller.
49	DM-DI	I	Pin for serial data input from another microcomputer.
50	DM-DO	O	Pin for serial data output to another microcomputer.
51	DM-CK	O	Pin for serial clock output to another microcomputer.
52	XSBSY	I	Pin for SBSY input from master DAT-DSP (IC503).
53	SR-DTI	I	Pin for serial data input from master DAT-DSP (IC503).

	Fs 48kHz	Fs 44.1kHz	Fs 32kHz
Pin ㉘	H	L	L
Pin ㉙	L	H	L
Pin ㉚	L	L	H

Pin No.	Pin Name	I/O	Pin Description
54	SR-DTO	O	Pin for serial data output to master DAT-DSP (IC503).
55	SR-CK	O	Pin for serial clock output to master DAT-DSP (IC503).
56	AVSS	—	GND
57	AVREF	—	Reference voltage pin (+5V)
58	AVDD	—	Power supply pin (+5V)
59	XMECH-BSY	I	Pin for communication busy input from mechanism microcomputer (IC502). ("L" : BUSY)
60	FOOT-SW1	I	Pull-up fixed.
61	FOOT-SW0	I	Pull-up fixed.
62	MODE1	I	Fixed at "L" level.
63	MODE0	I	Fixed at "L" level.
64	X24/12	I	24/12-hour system display select input pin ("H" : 12-hour system display (US, Canadian model), "L" : 24-hour system display (AEP, UK, German model)).
65	DATE-ODR	I	YY-MM-DD/DD-MM-YY display select input pin ("L" : Fixed to DD-MM-YY display)
66	PRL-REM	I	Pull-up fixed. Para-remote A/D input. (At connect with controller.)
67	X4HEAD	I	Fixed at "L" level.
68	XPRODIO	I	Fixed at "L" level.
69	XFADER	I	Fixed at "H" level.
70	MUT-MONIT	I	Pin for mute monitor input from master DAT-DSP (IC503).
71	XAES/COA	I	Pull-up fixed.
72	XCNT-S	I	Pull-up fixed.
73	MODE3	I	Fixed at "H" level.
74	MODE2	I	Fixed at "H" level.
75, 76	LED1, 0	O	Remote commander LED output pin
77—85	—	—	Not used.
86	XTEST	I	TEST pin ("L" : TEST MODE)
87	POW-DWN	I	Fixed at "H" level.
88	VSS	—	GND
89	VDD	—	Power supply pin (+5V)
90	VPP	—	Connect to VDD.
91, 92	—	—	Not used.
93	XADINT	O	A/D digital filter initial setting output pin ("L" : INIT)
94	XDAINT	O	D/A digital filter initial setting output pin ("L" : INIT)
95	REC-DIS	O	Recording current control output pin ("L" : Normally, "H" : Recording current forced OFF)
96	EXSY-MUT	O	EXSY output control pin ("L" : Normally, "H" : EXSY forced OFF)
97	XMST-SEL	O	Signal process IC chip select output pin
98	MST-MUTE	O	Playback data mute output pin ("L" : OFF, "H" : ON)
99, 100	—	—	Not used.

• Mechanism Microcomputer (IC502 CXP87532-023Q)

Pin No.	Pin Name	I/O	Pin Description
1	FPM-KI	O	FWD plunger kick control output
2	CAP-RVS	O	Capstan rotation direction control output. "H" for FWD and "L" for REV.
3	BPM-ON	O	Brake plunger ON control output
4	BPM-KI	O	Brake plunger kick control output
5	$\overline{\text{DRM}}$-ON	O	Drum motor ON control output
6	—	O	Not used.
7	—	O	
8	—	O	
9	—	O	
10	—	O	
11	—	O	
12	—	O	
13	—	O	
14	—	O	
15	LE-EJCT	O	Loading motor rotation direction control output (Eject direction)
16	LM-LOAD	O	Loading motor rotation direction control output (Loading direction)
17	CM-OUT	O	Cassette compartment motor rotation direction control output (OUT direction)
18	CM-IN	O	Cassette compartment motor rotation direction control output (IN direction)
19	XROM-CK	O	EEPROM serial clock output
20	XROM-DT	I/O	EEPROM serial data input/output
21	—	O	Not used.
22	—	O	
23	H-FIX	I	Not used. (Fixed at "H" level.)
24	H-FIX	I	
25	CAS-IN	I	Cassette IN switch input
26	REC-EN	I	REC enable switch input
27	CAS-LCK	I	Cassette compartment lock switch input
28	CAS-OUT	I	Cassette compartment OUT switch input
29	UNLD-SW	I	UNLOAD switch input. "H" in UNLOAD position.
30	LOAD-SW	I	LOAD switch. "H" in STOP position.
31	—	O	Not used.
32	—	O	
33	—	O	
34	—	O	
35	H-FIX	I	Not used. (Fixed at "H" level.)
36	H-FIX	I	
37	H-FIX	I	
38	H-FIX	I	
39	MP	—	Connect to GND.
40	XRST	I	Reset input. "L" for reset.
41	VSS	—	GND
42	XTAL	O	Crystal oscillator output pin (9.408MHz). (Not used in this set.)
43	EXTAL	I	Crystal oscillator input pin (9.408MHz)
44	XMECH-BSY	O	Mechanism microcomputer BUSY signal input
45	—	O	Not used.
46	TLED-ON	O	T-END sensor ON output. "H" for ON.
47	SLED-ON	O	S-END sensor ON output. "H" for ON.
48	XSBSY	I	SUB SYNC input from main microcomputer (IC501).

Pin No.	Pin Name	I/O	Pin Description
49	—	I	Not used.
50	—	O	
51	—	O	
52	XMECH-REQ	I	Communication request input from main microcomputer (IC501).
53	MECH-DTI	I	Serial data input from main microcomputer (IC501).
54	MECH-DTO	O	Serial data output to main microcomputer (IC501).
55	MECH-SCK	I	Serial clock input from main microcomputer (IC501).
56	AVSS	—	A/D port GND
57	AVREF	—	A/D port reference voltage (+5V)
58	AVDD	—	A/D port power supply (+5V)
59	TEND	I	T-END sensor input
60	SEND	I	S-END sensor input
61	H-FIX	I	Fixed at "H" level.
62	H-FIX	I	
63	THICK	I	THICK switch input
64	SET-MODE	I	Fixed at "L" level.
65	CAS-MODE	I	Fixed at "L" level.
66	ATF-IN	I	ATF pilot signal input
67	TFG	I	T reel FG signal input
68	SFG	I	S reel FG signal input
69	CFG	I	Capstan FG signal input
70	DFG	I	Drum FG signal input
71	DPG	I	Drum PG signal input
72	DREF	I	Drum reference signal input
73	ATF-S2	I	Input of AFT sampling pulse for DPG automatic adjustement.
74	H-FIX	I	Not used. (Fixed at "H" level.)
75	—	O	Not used.
76	XCAS-TST	I	Test pin. "L" for cassette compartment without test mode.
77	MST-CLK	I	Master clock input
78	PBDT	I	PB data for ATF SYNC.
79	SWP	O	Switching pulse output
80	AGC-PWM	O	Output of PWM signal for AGC.
81	T-PWM	O	Output of PWM signal for T reel.
82	S-PWM	O	Output of PWM signal for S reel.
83	D-PWM	O	Output of PWM signal for drum.
84	C-PWM	O	Output of PWM signal for capstan.
85	H-FIX	I	Not used. (Fixed at "H" level.)
86	XTEST	I	Test pin. "L" for test mode. (Used at D PG, PASS and torque.)
87	POW-DWN	I	Not used. (Fixed at "H" level.)
88	VSS	—	GND
89	VDD	—	+5V power supply
90	VPP	—	Connect to +5V.
91	ATF-S2	O	ATF sampling pulse # 2 output
92	AREA	O	AREA signal output
93	—	O	Not used.
94	—	O	
95	—	O	
96	XLP-REC	O	LP REC control output. "L" for LP mode REC.

Pin No.	Pin Name	I/O	Pin Description
97	—	O	Not used.
98	—	O	
99	XTLK	O	Reel motor T LOCK control output. "L" for T LOCK.
100	FPM-ON	O	FWD plunger ON control output

• Master DAT-DSP (IC503 CXD2605Q)

Pin No.	Pin Name	I/O	Pin Description
1	A8	O	External RAM address output
2	A9	O	External RAM address output
3	VDD	—	+5V
4	A10	O	External RAM address output
5	A11	O	External RAM address output
6	A12	O	External RAM address output
7	A13	O	External RAM address output
8	A14	O	External RAM address output
9	XWE	O	External RAM write enable signal output
10	XOE	O	External RAM output enable signal output
11	XEAN	O	External addressing enable signal output (Not used in this set.)
12	TST1	I	Test input (Fixed at "L" level.)
13	XT1O	O	X'tal oscillation circuit 1 output
14	XT1I	I	X'tal oscillation circuit 1 input
15	VSS	—	GND
16	XRST	I	Reset input. "L" for reset.
17	CLKO	O	System clock output. (The frequency is 4.9152 MHz when SELC is set "L" and 8.192MHz when SELC is set "H".) (Not used in this set.)
18	MINT	O	Control byte (1). Bit 1 : Q code decode (intercurve detection) output when "L" and BCK clock output by RX-PLL when "H". (Not used in this set.)
19	ATSY	I	ATF sync signal input
20	MCLK	O	Channel clock (fch) output (Not used in this set.)
21	DREF	O	SBSY cycled Duty 50 signal output
22	SBPM	O	Control byte (1). Bit 1 : Output of monitor signal for data transfer to and from microcomputer when "L" ("L" to permit transfer) and F256 clock output by RX-PLL when "H". (Not used in this set.)
23	EXCK	I	Input of clock for data transfer to and from main microcomputer (IC501).
24	SDSI	I	Serial data input from main microcomputer (IC501).
25	SDSO	O	Serial data output to main microcomputer (IC501).
26	SBSY	O	Output of frame sync signal for data transfer to and from main microcomputer (IC501).
27	PLRF	O	Output of PLL clock divided by 5880. (Not used in this set.)
28	CCLK	O	9.8304MHz output when SELC is "L" and 12.288MHz output when SELC is "H". (Not use in this set.)
29	MUTE	I	Mute input. Set "H" to mute, but REC monitor sound will not be muted.
30	MUTM	O	Mute monitor. "H" in muting.
31	UNLK	O	RX-PLL lock monitor signal output. "L" in locking.
32	RFCT	I	Playback RF signal control. ("L" to enable RF signal and "H" to disable RF signal.)
33	SYMN	O	RF associated C1 check result monitor signal output. (Not used in this set.)
34	SELB	I	Test pin (Fixed at "H" level.)
35	PLCK	O	Control byte (1). Bit 1 : RF-PLL clock output when "L" and F128 clock output by RX-PLL when "H". (Not used in this set.)
36	TST2	I	Test pin (Fixed at "L" level.)
37	RFDT	I	Playback RF signal input
38	XCS	I	Input of chip select signal for data transfer to and from microcomputer. "L" to permit transfer.
39	SWP	I	RF switching pulse. "L" to select A track and "H" to select B track.
40	VSS	—	GND
41	PIPC	O	Output of ATF pilot signal/descrimination signal for recording signal. "H" to output pilot signal.

Pin No.	Pin Name	I/O	Pin Description
42	REPB	O	REC/PB descrimination signal output. "H" for REC mode.
43	REDT	O	Recording signal output
44	TST4	I	Test pin (Fixed at "L" level.)
45	PDO	O	RX-PLL phase comparator output
46	SELC	I	Oscillation frequency select signal input (Fixed at "L" level in this set.)
47	MUTA	I	Mute input. "H" to mute, and REC monitor sound is also muted.
48	PLCO	I	RX-PLL's external VCO clock input (512fs reference)
49	PLVR	O	Output of phase comparator signal for RX-PLL. (2fs generated from PLL clock.) (Not used in this set.)
50	PLRF	O	Output of phase comparator signal for RX-PLL. (RX SYNC detect signal 2fs) (Not used in this set.)
51	MSSL	I	Master mode/slave mode select. "H" for master mode.
52	RX	I	Digital interface signal input
53	VDD	—	+5V
54	TX	O	Digital interface signal output
55	SELA	I	Test pin (Fixed at "L" level.)
56	EXSY	I/O	External sync signal input/output
57	EXSN	I/O	External sync signal input/output
58	F128	I/O	128fs signal/256fs signal (high speed) input/output
59	F256	O	256fs signal/512fs signal (high speed) output (Not used in this set.)
60	F512	O	512fs signal output (Not used in this set.)
61	ADLF	I	ADDT, ADDI, ADDN serial data LSB/MSB first select input. "L" for LSB first.
62	DALF	I	DADT, DADO serial data LSB/MSB first select input. "L" for LSB first.
63	XT2O	O	X'tal oscillation circuit 2 output (Not used in this set.)
64	XT2I	I	X'tal oscillation circuit 2 input
65	VSS	—	GND
66	XT3O	O	X'tal oscillation circuit 3 output
67	XT3I	I	X'tal oscillation circuit 3 input
68	FSEN	I	F128, BCK, LRCK input/output select input. "H" for output.
69	LR03	O	Inverted LR02 signal (Not used in this set.)
70	LR02	O	Control byte (1). Bit 1 : 16BCK delayed LRCK signal when "L" and LRCK clock output by RX-PLL when "H" (Not used in this set.)
71	LR01	O	15BCK delayed LRCK signal
72	LRCK	I/O	fs/2fs (high speed) signal input/output
73	WCK	O	2fs/4fs (high speed) signal output (Not used in this set.)
74	XBCK	O	Inverted BCK signal output
75	BCK	I/O	64fs/128fs (high speed) signal input/output
76	ADDT	I	AD serial data input
77	DADT	O	DA serial data output
78	DADO	I	DIGITAL OUT audio data input
79	ADDI	O	DIGITAL IN audio data output
80	ADDN	I	DIGITAL IN audio data input
81	ERRI	I	DIGITAL OUT Validity flag data input
82	ERRF	O	DADT data's interpolation data/descrimination signal output. "H" for interpolation data.
83	MNTG	O	"H" output indicates that error correction status monitor data is being output to D7 to D0. (Not used in this set.)
84	D7	I/O	External RAM data input/output (MSB)

Pin No.	Pin Name	I/O	Pin Description
85	D6	I/O	External RAM data input/output
86	D5	I/O	External RAM data input/output
87	D4	I/O	External RAM data input/output
88	D3	I/O	External RAM data input/output
89	D2	I/O	External RAM data input/output
90	VSS	—	GND
91	D1	I/O	External RAM data input/output
92	D0	I/O	External RAM data input/output (LSB)
93	A0	O	External RAM address output
94	A1	O	External RAM address output
95	A2	O	External RAM address output
96	A3	O	External RAM address output
97	A4	O	External RAM address output
98	A5	O	External RAM address output
99	A6	O	External RAM address output
100	A7	O	External RAM address output

• Display Controller (IC701 CXP82316-061Q)

Pin No.	Pin Name	I/O	Pin Description
1	H	I	Fixed at "H" level.
2	RMC	I	Remote control input from IC703.
3	TEST	I	Test mode setting pin
4	A1 METER	O	Address 1 output to IC702.
5	A0 METER	O	Address 0 output to IC702.
6	M MUT	I	Level meter mute input pin
7	ACK	O	Pin for acknowledge output to main microcomputer (IC501).
8	SC	I	Pin for serial clock input from main microcomputer (IC501).
9	SI	I	Pin for serial data input from main microcomputer (IC501).
10	SO	O	Pin for serial data output to main microcomputer (IC501).
11	CS METER	O	Pin for chip select output to IC702.
12	RD METER	O	Pin for read output to IC702.
13	WR METER	O	Pin for write output to IC702.
14	REM SEL	O	Not used.
15	FWD LED	O	
16	PAUSE LED	O	
17	REC LED	O	
18—21	—	—	Empty pin
22—29	AD0—AD7	I	Key input pins
30	XRST	I/O	System reset pin (active "L")
31	EXTAL	I	System clock input pin
32	XTAL	O	System clock output pin (4.19MHz)
33	VSS	—	GND
34—57	S0—S23	O	FL tube segment output pins
58—70	T12—T0	O	FL tube grid output pins
71	VFDP	I	Power supply pin (−31V)
72	VDD	—	Power supply pin (+5V)
73	NC	—	Connect to VDD.
74—77	D0METER—D3METER	I/O	Pin for data input/output to and from IC702.
78	H	I	Fixed at "H" level.
79	REQ	I	Pin for communication request input from main microcomputer (IC501).
80	MODE	I	Fixed at "H" level.

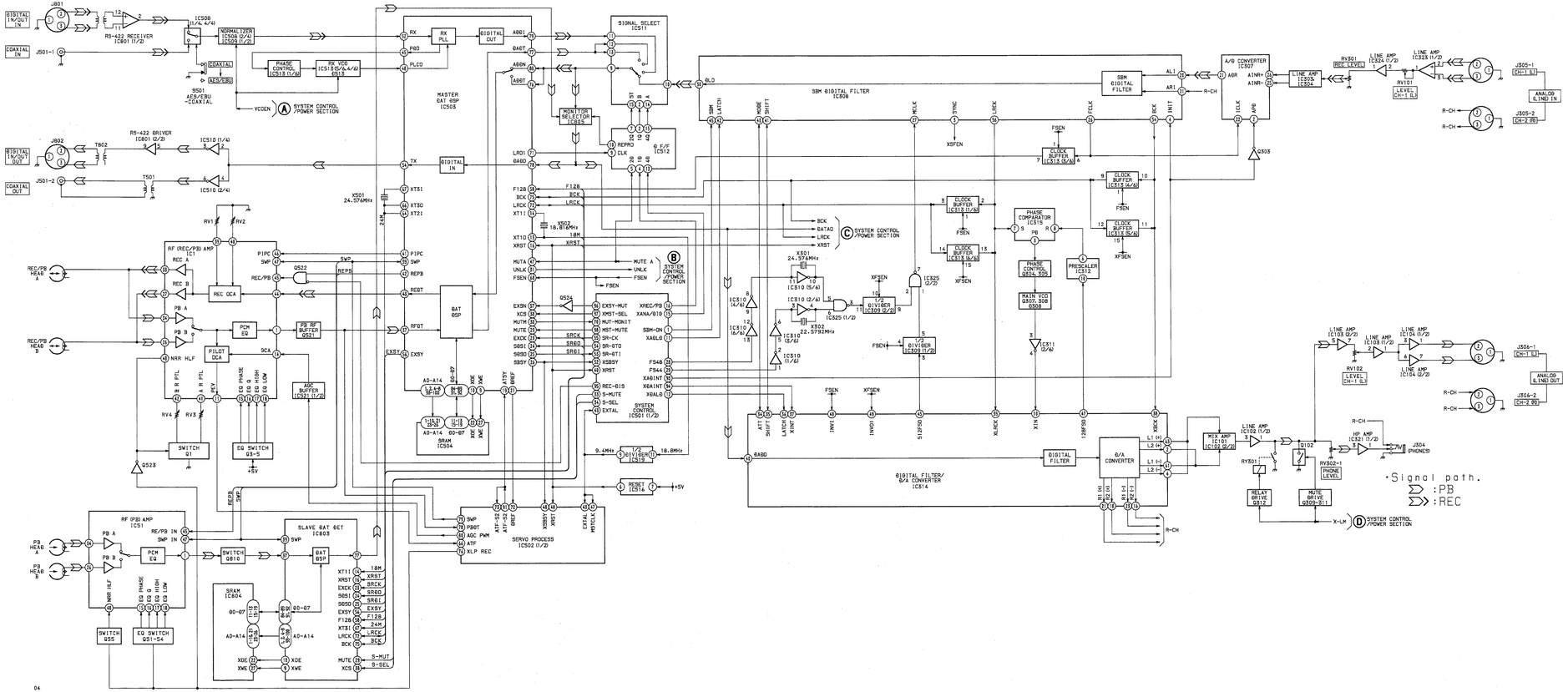
• Slave DAT-DSP (IC803 CXD2605Q)

Pin No.	Pin Name	I/O	Pin Description
1	A8	O	External RAM address output
2	A9	O	External RAM address output
3	VDD	—	+5V
4	A10	O	External RAM address output
5	A11	O	External RAM address output
6	A12	O	External RAM address output
7	A13	O	External RAM address output
8	A14	O	External RAM address output
9	XWE	O	External RAM write enable signal output
10	XOE	O	External RAM output enable signal output
11	XEAN	O	External addressing enable signal output (Not used in this set.)
12	TST1	I	Test input (Fixed at "L" level.)
13	XT1O	O	X'tal oscillation circuit 1 output (Not used in this set.)
14	XT1I	I	X'tal oscillation circuit 1 input
15	VSS	—	GND
16	XRST	I	Reset input. "L" for reset.
17	CLKO	O	System clock output. (The frequency is 4.9152 MHz when SELC is set "L" and 8.192MHz when SELC is set "H".) (Not used in this set).
18	MINT	O	Control byte (1). Bit 1 : Q code decode (intercurve detection) output when "L" and BCK clock output by RX-PLL when "H". (Not used in this set.)
19	ATSY	I	ATF sync signal input (Not used in this set.)
20	MCLK	O	Channel clock (fch) output (Not used in this set.)
21	DREF	O	SBSY cycled Duty 50 signal output (Not used in this set.)
22	SBPM	O	Control byte (1). Bit 1 : Output of monitor signal for data transfer to and from microcomputer when "L" ("L" to permit transfer) and F256 clock output by RX-PLL when "H". (Not used in this set.)
23	EXCK	I	Input of clock for data transfer to and from main microcomputer (IC501).
24	SDSI	I	Serial data input from main microcomputer (IC501).
25	SDSO	O	Serial data output to main microcomputer (IC501).
26	SBSY	O	Output of frame sync signal for data transfer to and from main microcomputer. (Not used in this set.)
27	PLRF	O	Output of PLL clock divided by 5880. (Not used in this set.)
28	CCLK	O	9.8304MHz output when SELC is "L" and 12.288MHz output when SELC is "H". (Not use in this set.)
29	MUTE	I	Mute input. Set "H" to mute, but REC monitor sound will not be muted.
30	MUTM	O	Mute monitor. "H" in muting. (Not used in this set.)
31	UNLK	O	RX-PLL lock monitor signal output. "L" in locking. (Not used in this set.)
32	RFCT	I	Playback RF signal control. ("L" to enable RF signal and "H" to disable RF signal.)
33	SYMN	O	RF associated C1 check result monitor signal output. (Not used in this set.)
34	SELB	I	Test pin (Fixed at "H" level.)
35	PLCK	O	Control byte (1). Bit 1 : RF-PLL clock output when "L" and F128 clock output by RX-PLL when "H". (Not used in this set.)
36	TST2	I	Test pin (Fixed at "L" level.)
37	RFDT	I	Playback RF signal input
38	XCS	I	Input of chip select signal for data transfer to and from microcomputer. "L" to permit transfer.
39	SWP	I	RF switching pulse. "L" to select A track and "H" to select B track.
40	VSS	—	GND
41	PIPC	O	Output of ATF pilot signal/descrimination signal for recording signal. "H" to output pilot signal. (Not used in this set.)

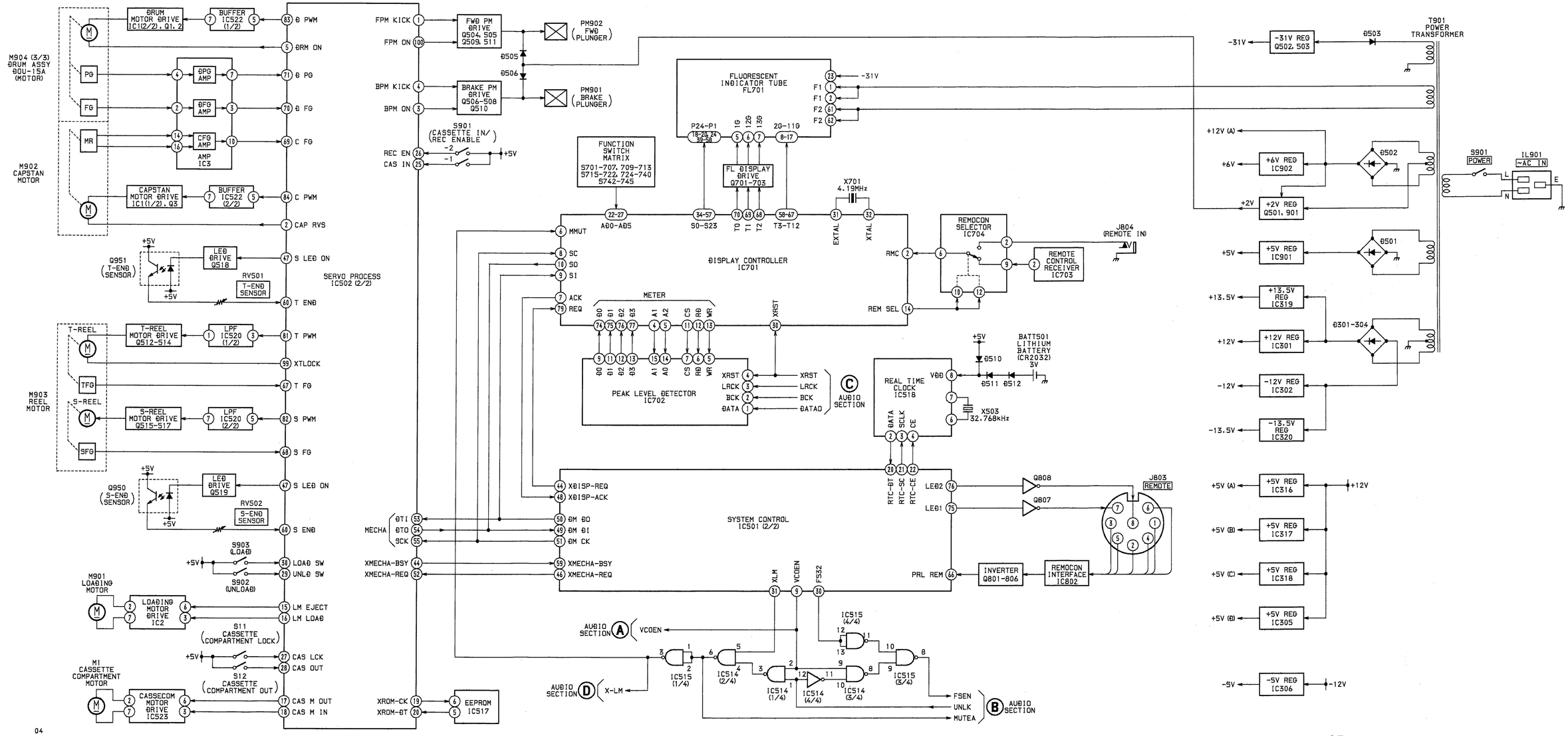
Pin No.	Pin Name	I/O	Pin Description
42	REPB	O	REC/PB descrimination signal output. "H" for REC mode. (Not used in this set.)
43	REDT	O	Recording signal output
44	TST4	I	Test pin (Fixed at "L" level.)
45	PDO	O	RX-PLL phase comparator output (Not used in this set.)
46	SELC	I	Oscillation frequency select signal input (Fixed at "L" level in this set.)
47	MUTA	I	Mute input. "H" to mute, and REC monitor sound is also muted.
48	PLCO	I	RX-PLL's external VCO clock input (512fs reference). (Not used in this set.)
49	PLVR	O	Output of phase comparator signal for RX-PLL. (2fs generated from PLL clock.) (Not used in this set.)
50	PLRF	O	Output of phase comparator signal for RX-PLL. (RX SYNC detect signal 2fs) (Not used in this set.)
51	MSSL	I	Master mode/slave mode select. "L" for slave mode.
52	RX	I	Digital interface signal input (Not used in this set.)
53	VDD	—	+5V
54	TX	O	Digital interface signal output (Not used in this set.)
55	SELA	I	Test pin (Fixed at "H" level.)
56	EXSY	I/O	External sync signal input/output
57	EXSN	I/O	External sync signal input/output (Not used in this set.)
58	F128	I/O	128fs signal/256fs signal (high speed) input/output
59	F256	O	256fs signal/512fs signal (high speed) output (Not used in this set.)
60	F512	O	512fs signal output (Not used in this set.)
61	ADLF	I	ADDT, ADDI, ADDN serial data LSB/MSB first select input. "L" for LSB first.
62	DALF	I	DADT, DADO serial data LSB/MSB first select input. "L" for LSB first.
63	XT2O	O	X'tal oscillation circuit 2 output (Not used in this set.)
64	XT2I	I	X'tal oscillation circuit 2 input (Not used in this set.)
65	VSS	—	GND
66	XT3O	O	X'tal oscillation circuit 3 output (Not used in this set.)
67	XT3I	I	X'tal oscillation circuit 3 input
68	FSEN	I	F128, BCK, LRCK input/output select input. "L" for input.
69	LR03	O	Inverted LR02 signal (Not used in this set.)
70	LR02	O	Control byte (1). Bit 1 : 16BCK delayed LRCK signal when "L" and LRCK clock output by RX-PLL when "H" (Not used in this set.)
71	LR01	O	15BCK delayed LRCK signal (Not used in this set.)
72	LRCK	I/O	fs/2fs (high speed) signal input/output
73	WCK	O	2fs/4fs (high speed) signal output (Not used in this set.)
74	XBCK	O	Inverted BCK signal output (Not used in this set.)
75	BCK	I/O	64fs/128fs (high speed) signal input/output
76	ADDT	I	AD serial data input (Not used in this set.)
77	DADT	O	DA serial data output
78	DADO	I	DIGITAL OUT audio data input (Not used in this set.)
79	ADDI	O	DIGITAL IN audio data output (Not used in this set.)
80	ADDN	I	DIGITAL IN audio data input (Not used in this set.)
81	ERRI	I	DIGITAL OUT Validity flag data input (Not used in this set.)
82	ERRF	O	DADT data's interpolation data/descrimination signal output. "H" for interpolation data. (Not used in this set.)
83	MNTG	O	"H" output indicates that error correction status monitor data is being output to D7 to D0. (Not used in this set.)
84	D7	I/O	External RAM data input/output (MSB)

Pin No.	Pin Name	I/O	Pin Description
85	D6	I/O	External RAM data input/output
86	D5	I/O	External RAM data input/output
87	D4	I/O	External RAM data input/output
88	D3	I/O	External RAM data input/output
89	D2	I/O	External RAM data input/output
90	VSS	—	GND
91	D1	I/O	External RAM data input/output
92	D0	I/O	External RAM data input/output (LSB)
93	A0	O	External RAM address output
94	A1	O	External RAM address output
95	A2	O	External RAM address output
96	A3	O	External RAM address output
97	A4	O	External RAM address output
98	A5	O	External RAM address output
99	A6	O	External RAM address output
100	A7	O	External RAM address output

4-2. BLOCK DIAGRAM—AUDIO SECTION—



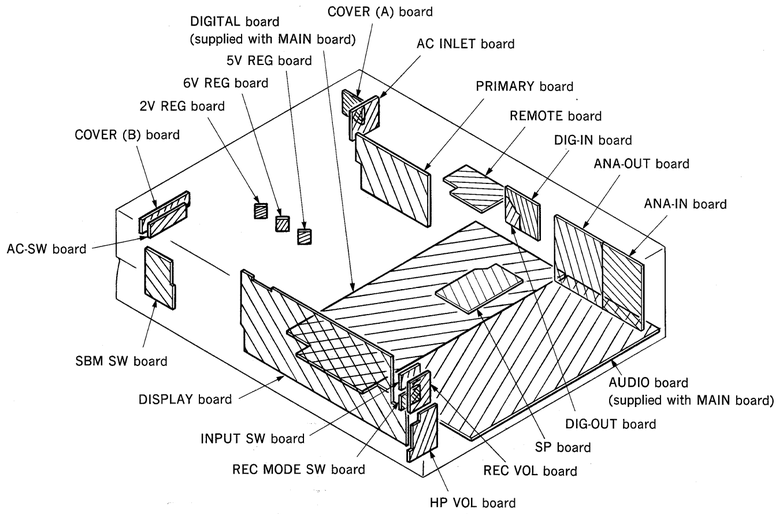
4-3. BLOCK DIAGRAM—SYSTEM CONTROL/POWER SECTION—



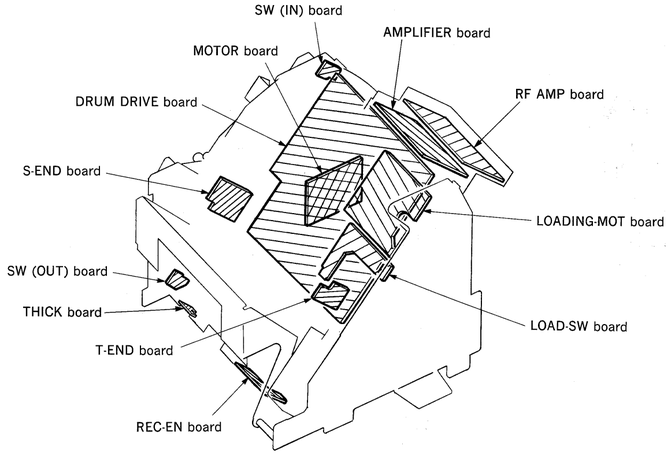
04

4-4. CIRCUIT BOARDS LOCATION

• Main Section



• Mechanism Deck Block



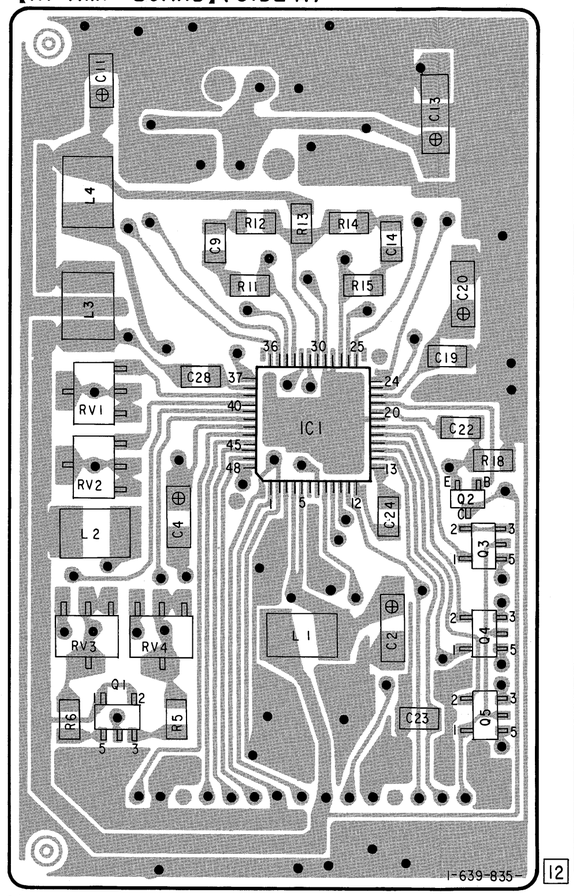
• Semiconductor Location

Ref. No.	Location
IC1	C-2
Q1	D-1
Q2	C-3
Q3	D-3
Q4	D-3
Q5	D-3

Note :
- ○— : parts extracted from the component side.
- ● : Through hole.
- ▨ : Pattern on the side which is seen.
(The other layer's patterns are not indicated.)

4-5. PRINTED WIRING BOARD—RF (REC/PB) AMP SECTION—

【RF AMP BOARD】(SIDE A)



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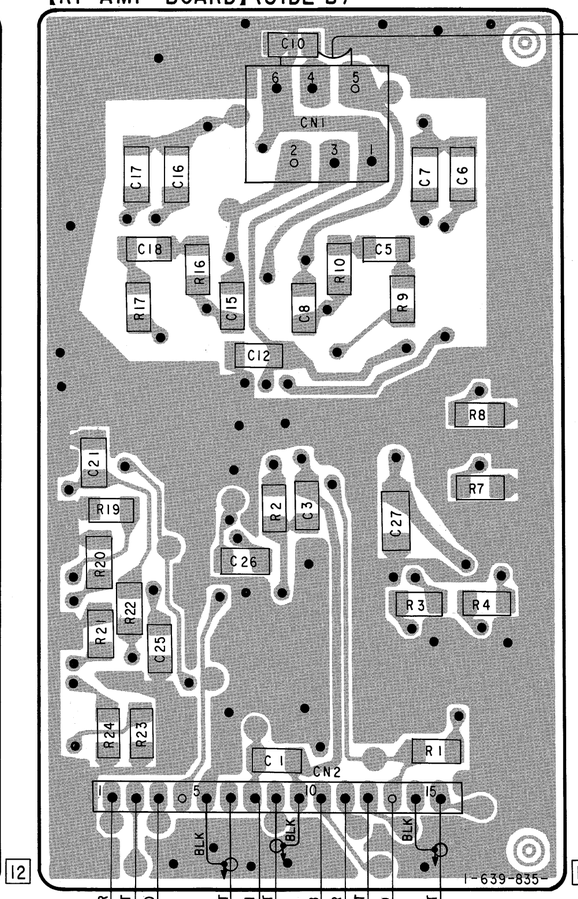
【RF AMP BOARD】(SIDE B)

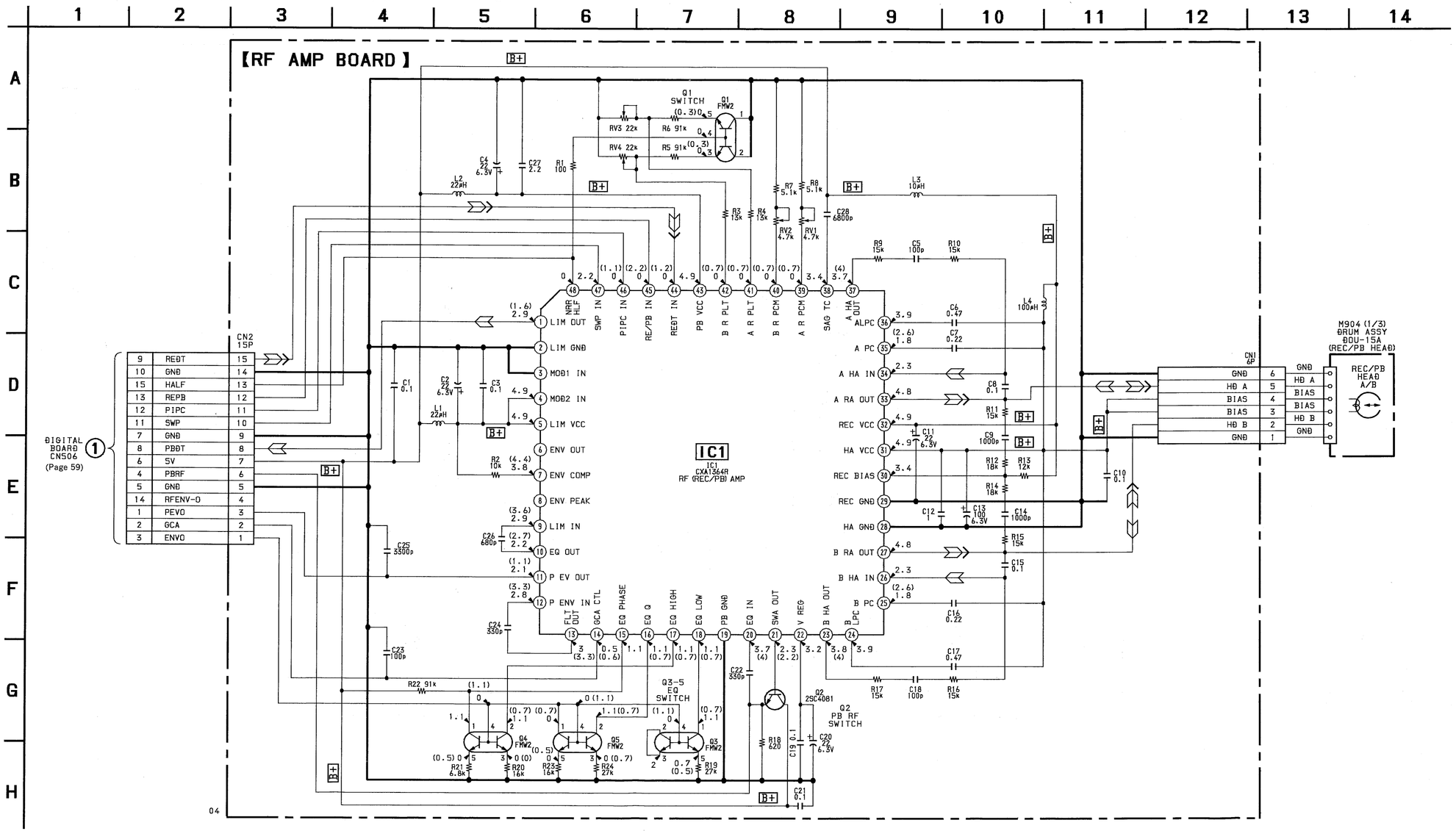


W/R WHT RED WHT BRN WHT W/B W/R WHT RED WHT

10 M904(1/3) DRUM ASSY (Page 49)

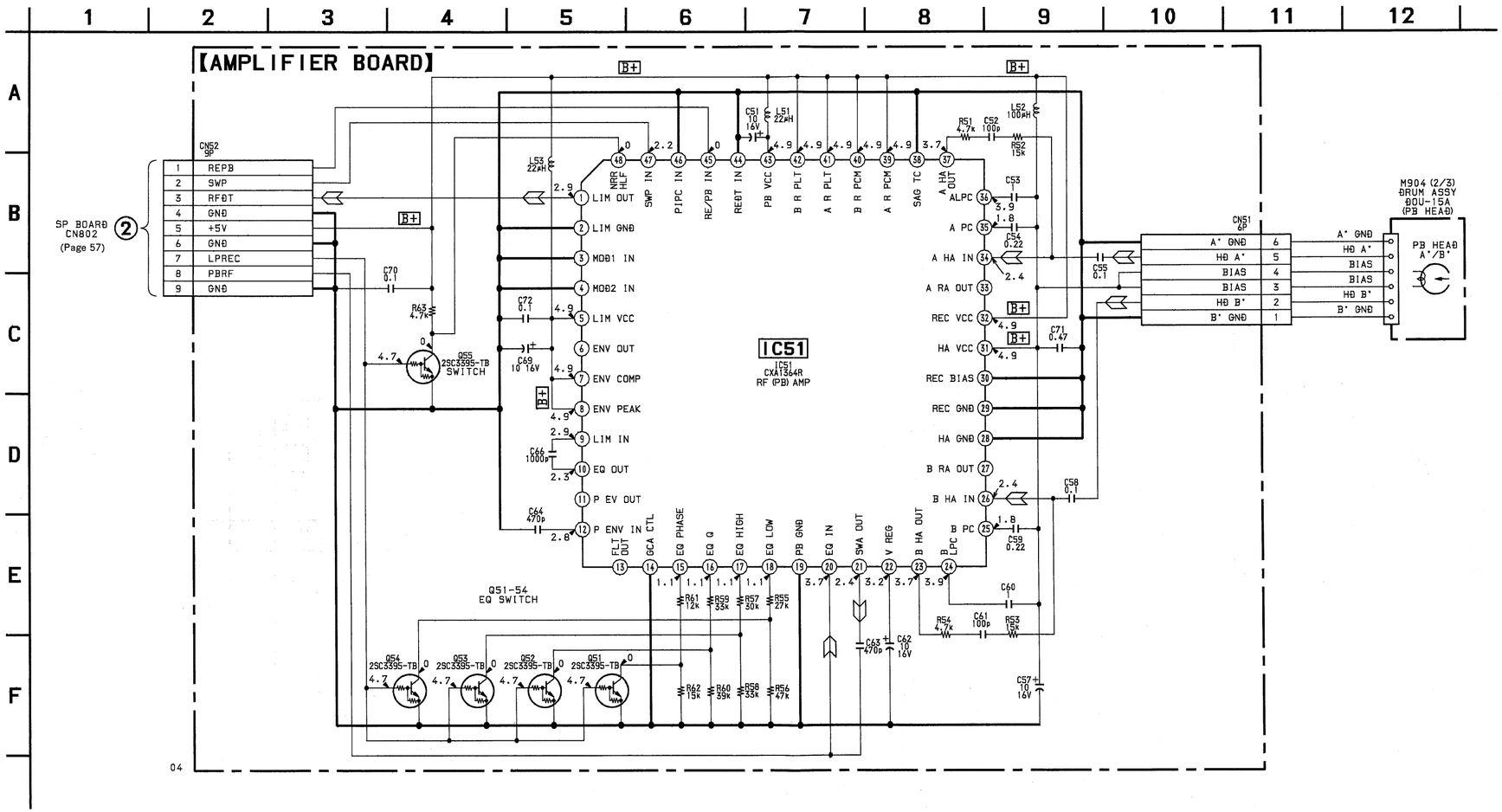
1 DIGITAL BOARD CN506 (Page 55)

4-6. SCHEMATIC DIAGRAM—RF (REC/PB) AMP SECTION— • Refer to page 76 for IC Block Diagrams.



Note :
- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- B+ : B+ Line
- Voltage is dc with respect to ground under no-signal conditions.
- no mark: PB
  ( ): REC
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  : PB
  : REC

4-7. SCHEMATIC DIAGRAM—RF (PB) AMP SECTION— • Refer to page 76 for IC Block Diagrams.

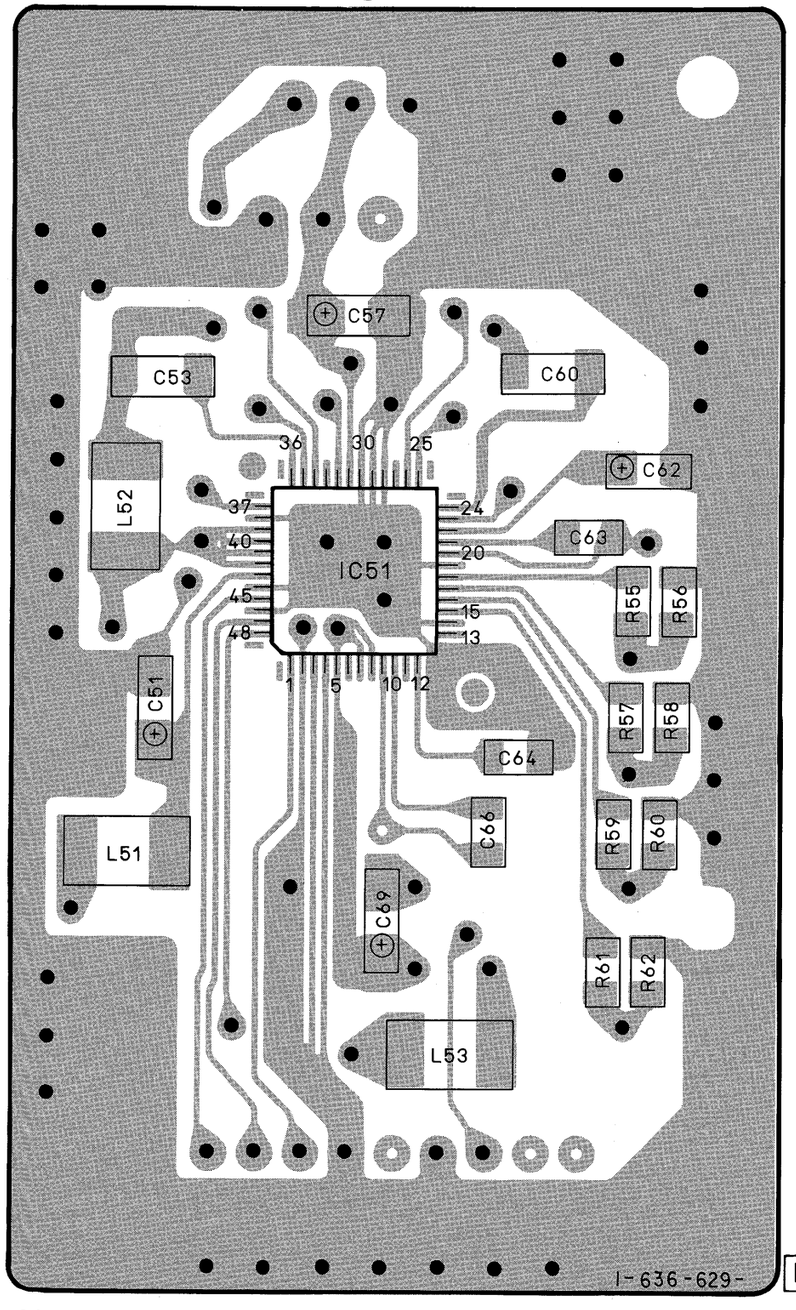


Note :

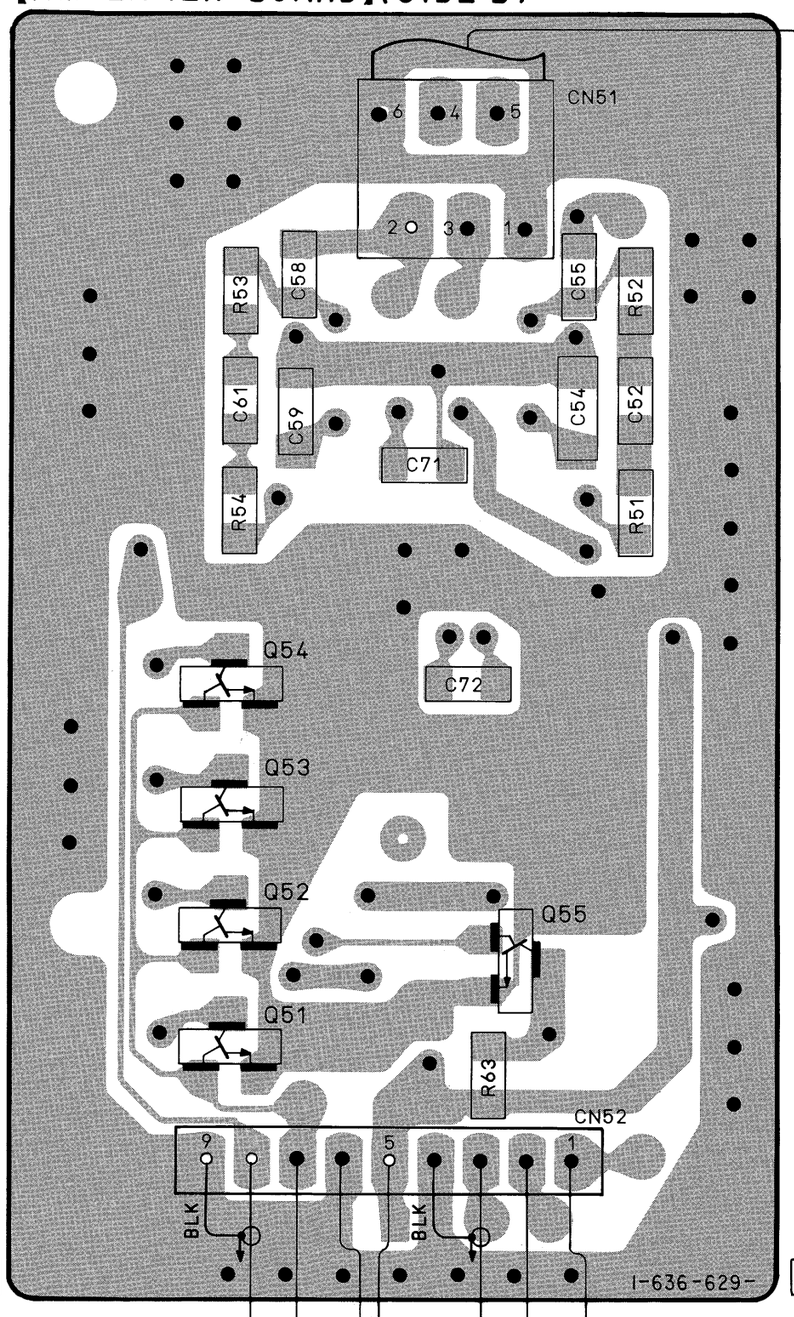
- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- B+ : B+ Line
- Voltage is dc with respect to ground under no-signal conditions.
- no mark: PB
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  : PB

4-8. PRINTED WIRING BOARD—RF (PB) AMP SECTION—

【AMPLIFIER BOARD】(SIDE A)



【AMPLIFIER BOARD】(SIDE B)



11 M904(2/3) DRUM ASSY (Page 49)

WHT GRY GRY WHT WHT GRY WHT

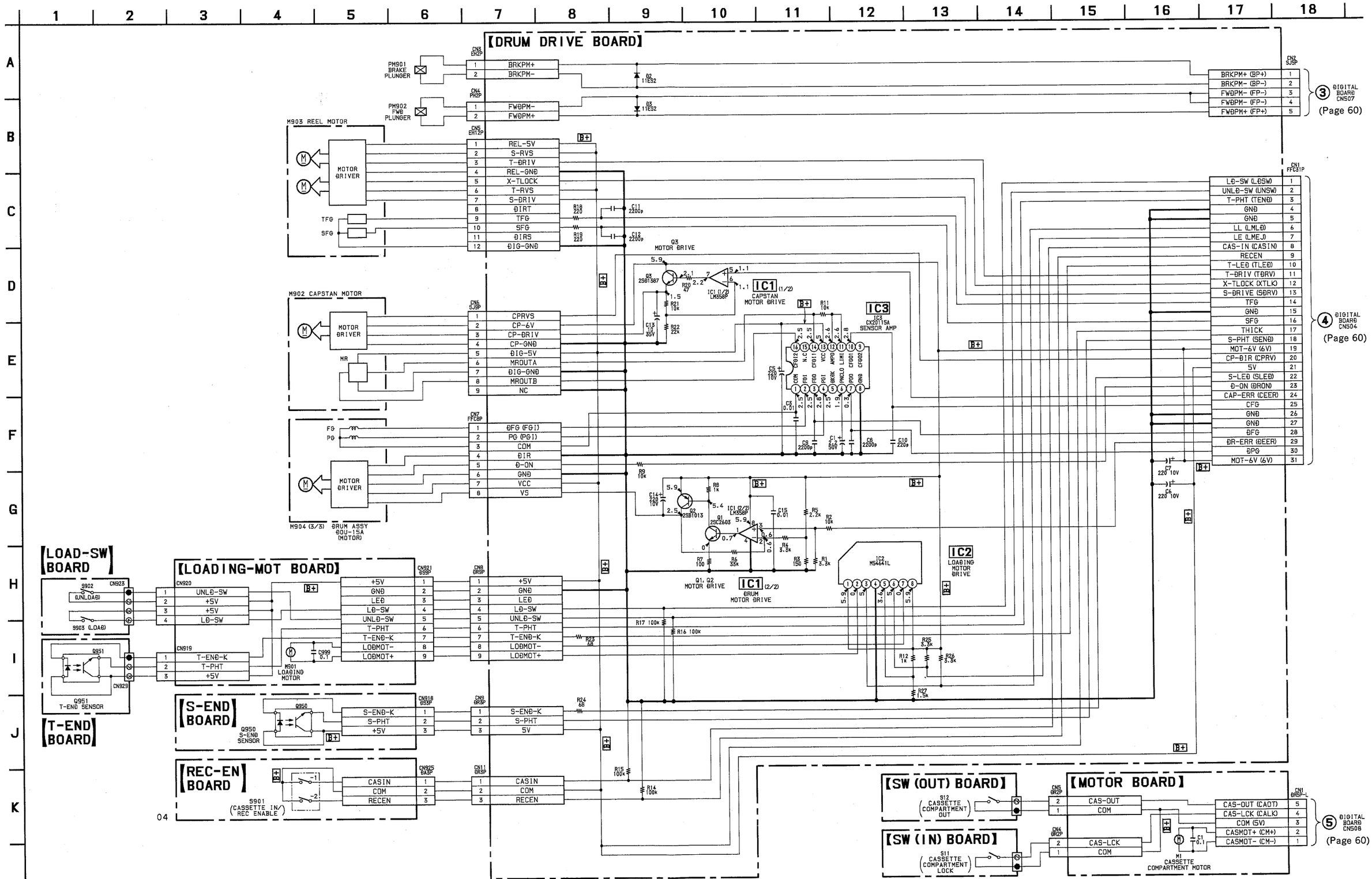
2 SP BOARD CN802 (Page 56)

● Semiconductor Location

Ref. No.	Location
IC51	C-2
Q51	D-5
Q52	D-5
Q53	C-5
Q54	C-5
Q55	D-6

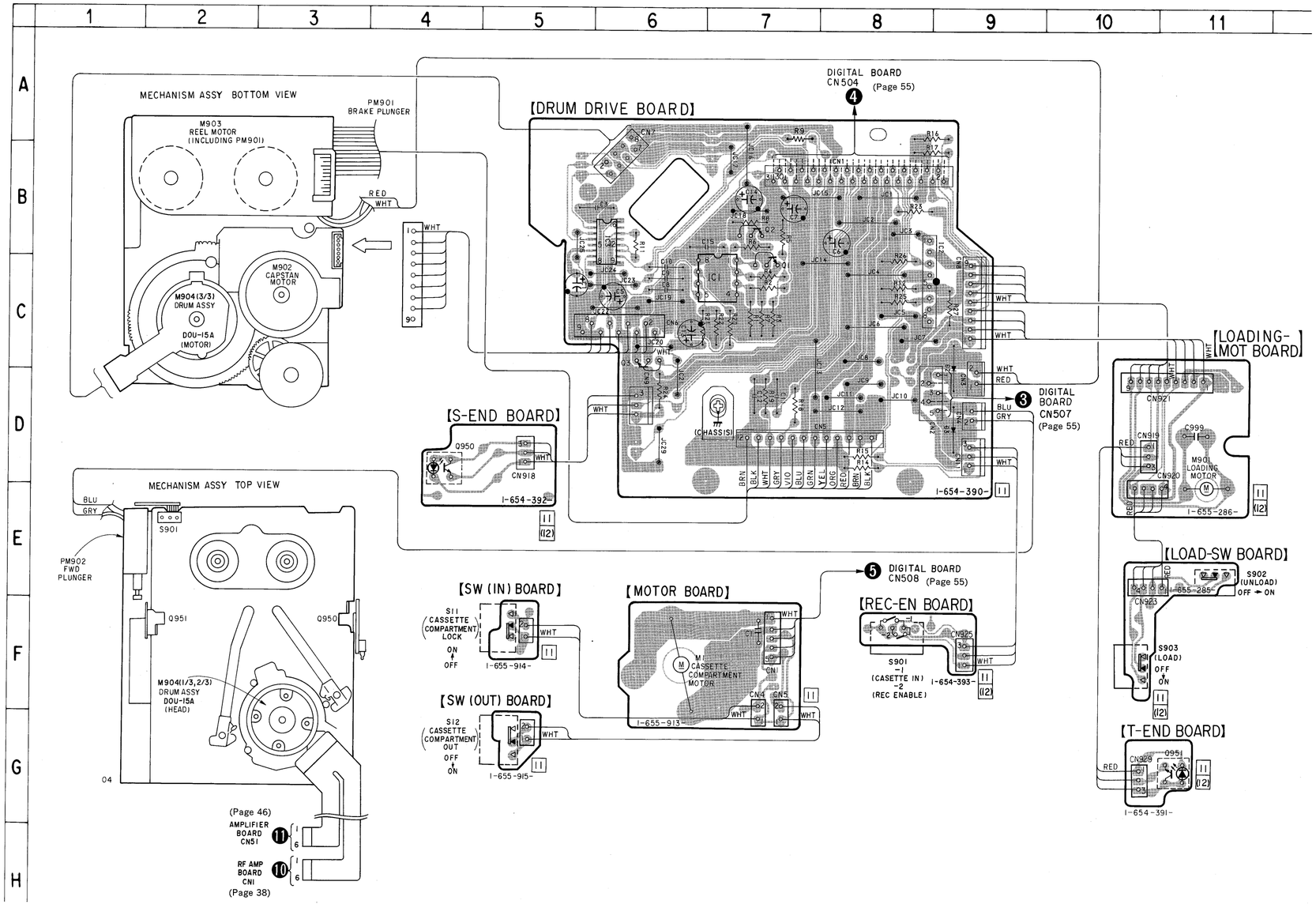
Note :
- ○— : parts extracted from the component side.
- ● : Through hole.
- ▨ : Pattern on the side which is seen.
(The other layer's patterns are not indicated.)

4-9. SCHEMATIC DIAGRAM—MD SECTION— • Refer to page 76 for IC Block Diagrams.



Note :

- All capacitors are in μF unless otherwise noted. pF : $\mu\mu$F 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- B+ : B+ Line
- Voltage is dc with respect to ground under no-signal conditions.
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.



● **Semiconductor Location**

Ref. No.	Location
D2	C-9
D3	D-9
IC1	C-7
IC2	B-8
IC3	B-6
Q1	C-7
Q2	B-7
Q3	C-6
Q950	D-4
Q951	G-11

Note :

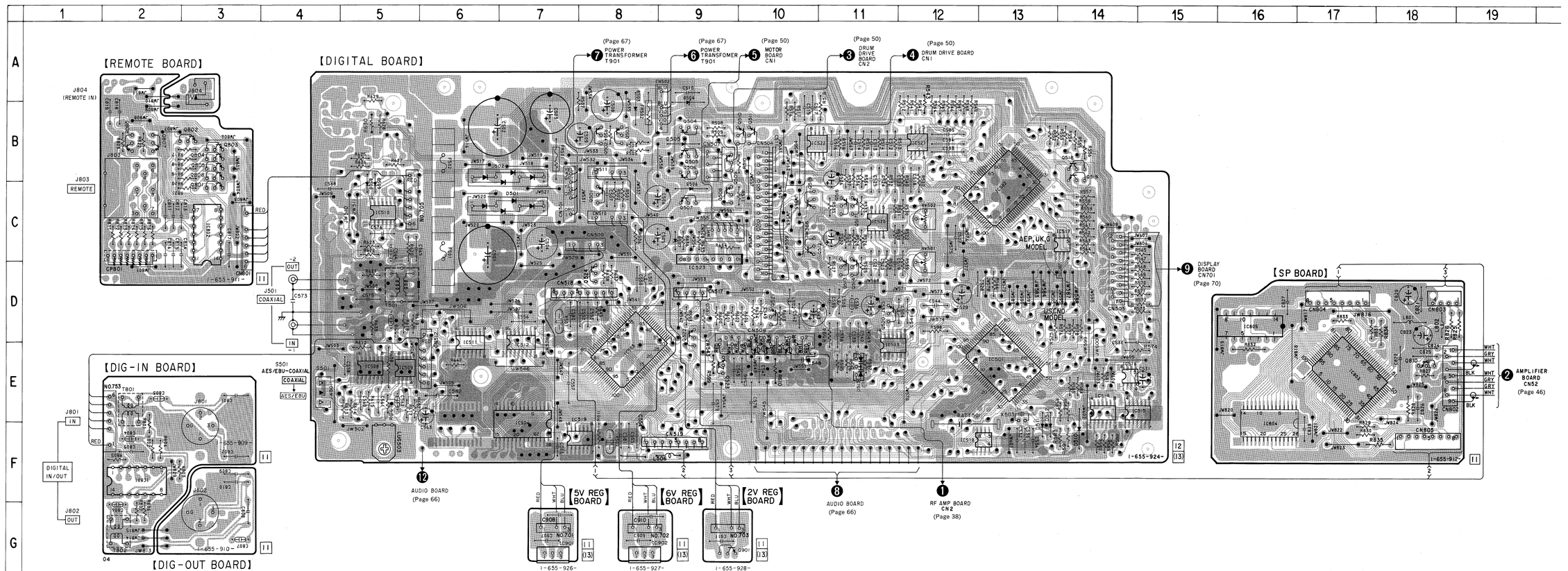
- ○— : parts extracted from the component side.
- ▒▒ : Pattern on the side which is seen.

4-11. PRINTED WIRING BOARDS—DIGITAL SECTION—

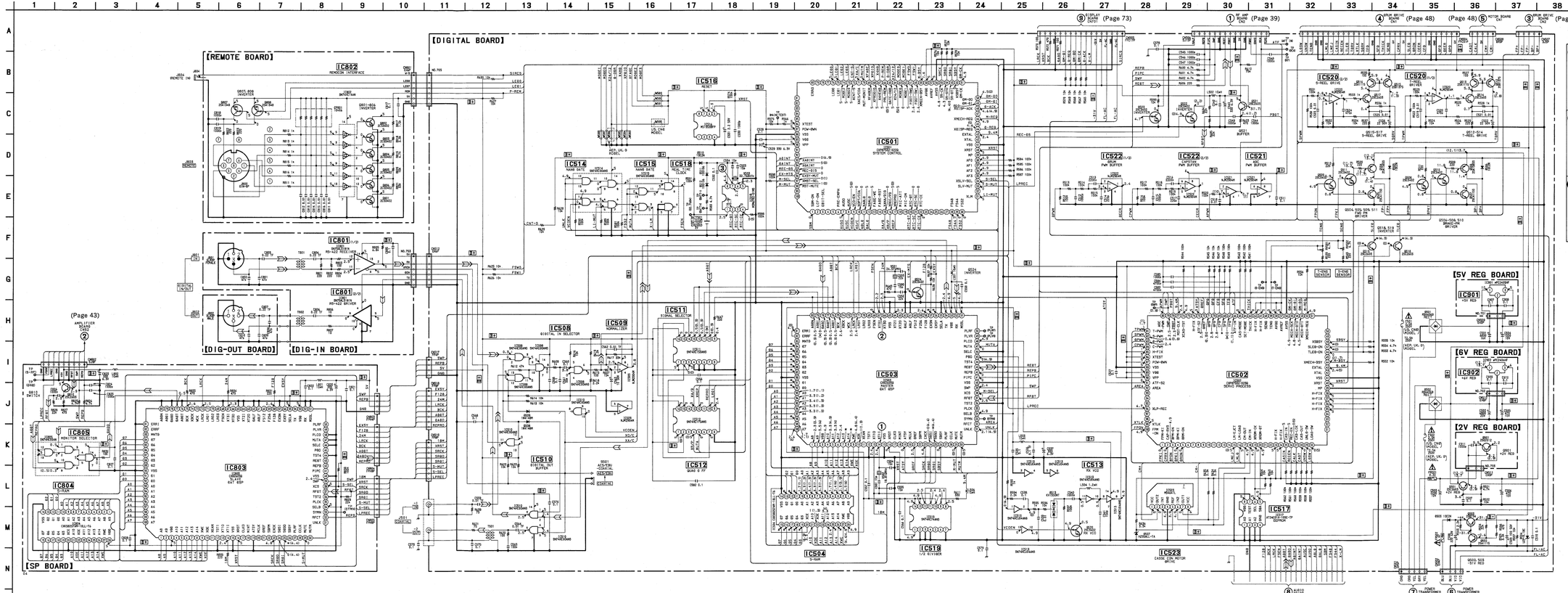
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D501	C-7	IC805	D-16
D502	B-7	IC901	G-7
D503	B-8	IC902	G-8
D504	B-9		
D505	B-9	Q501	C-8
D506	C-9	Q502	B-8
D507	C-9	Q503	B-8
D508	C-5	Q504	B-9
D509	C-5	Q505	B-9
D510	F-14	Q506	B-9
D511	F-13	Q507	C-9
D512	F-13	Q508	C-9
D513	E-11	Q509	B-9
		Q510	B-10
IC501	E-13	Q511	B-10
IC502	B-13	Q512	C-10
IC503	D-8	Q513	D-11
IC504	E-7	Q514	D-11
IC508	E-5	Q515	C-10
IC509	E-5	Q516	C-11
IC510	C-5	Q517	C-11
IC511	D-6	Q518	B-14
IC512	D-7	Q519	B-14
IC513	E-11	Q520	D-11
IC514	E-14	Q521	D-10
IC515	E-14	Q522	D-9
IC516	E-14	Q523	E-9
IC517	C-14	Q524	D-8
IC518	F-12	Q801	C-3
IC519	E-8	Q802	B-3
IC520	C-11	Q803	B-3
IC521	B-12	Q804	B-3
IC522	B-10	Q805	B-3
IC523	C-9	Q806	B-3
IC801	F-2	Q807	B-2
IC802	C-3	Q808	B-2
IC803	E-17	Q810	E-18
IC804	E-16	Q901	G-9

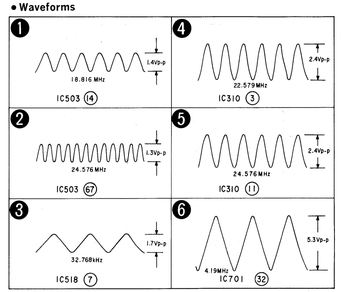
Note :
- ○— : parts extracted from the component side.
- ● : Through hole.
- [ ]— indicates side identified with part number.
- ▭ : Pattern on the side which is seen.
- ▭ : Pattern on the rear side.
- Abbreviation
  CND : Canadian model
  G : German model



4-12. SCHEMATIC DIAGRAM—DIGITAL SECTION— • Refer to page 76 for IC Block Diagrams.



• Waveforms

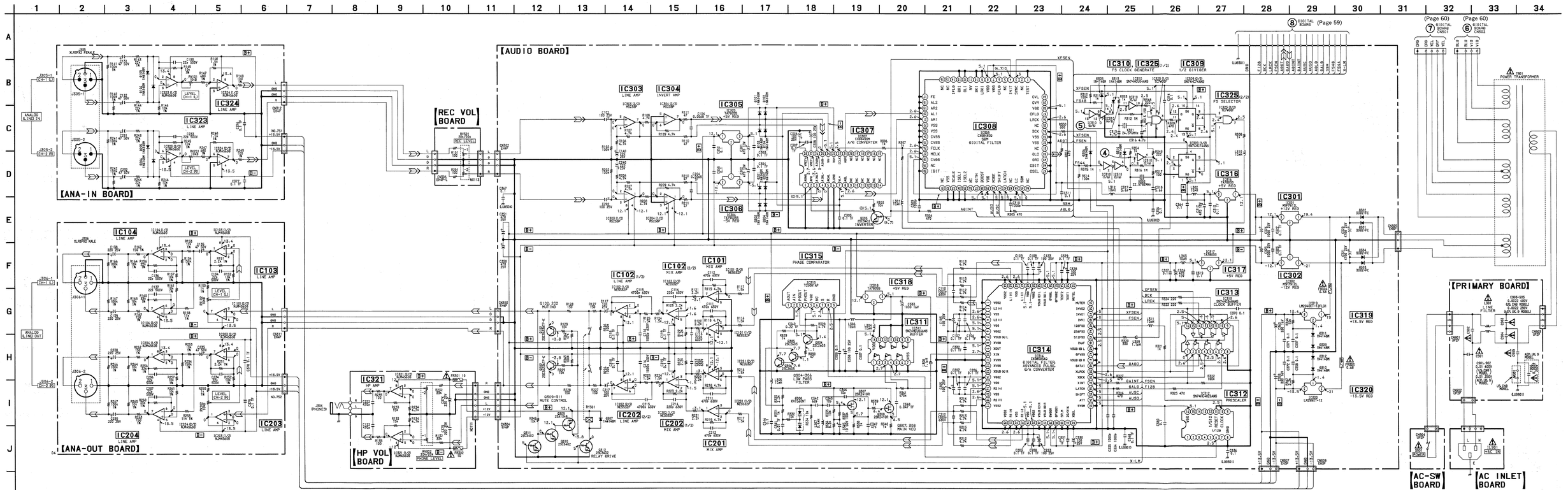


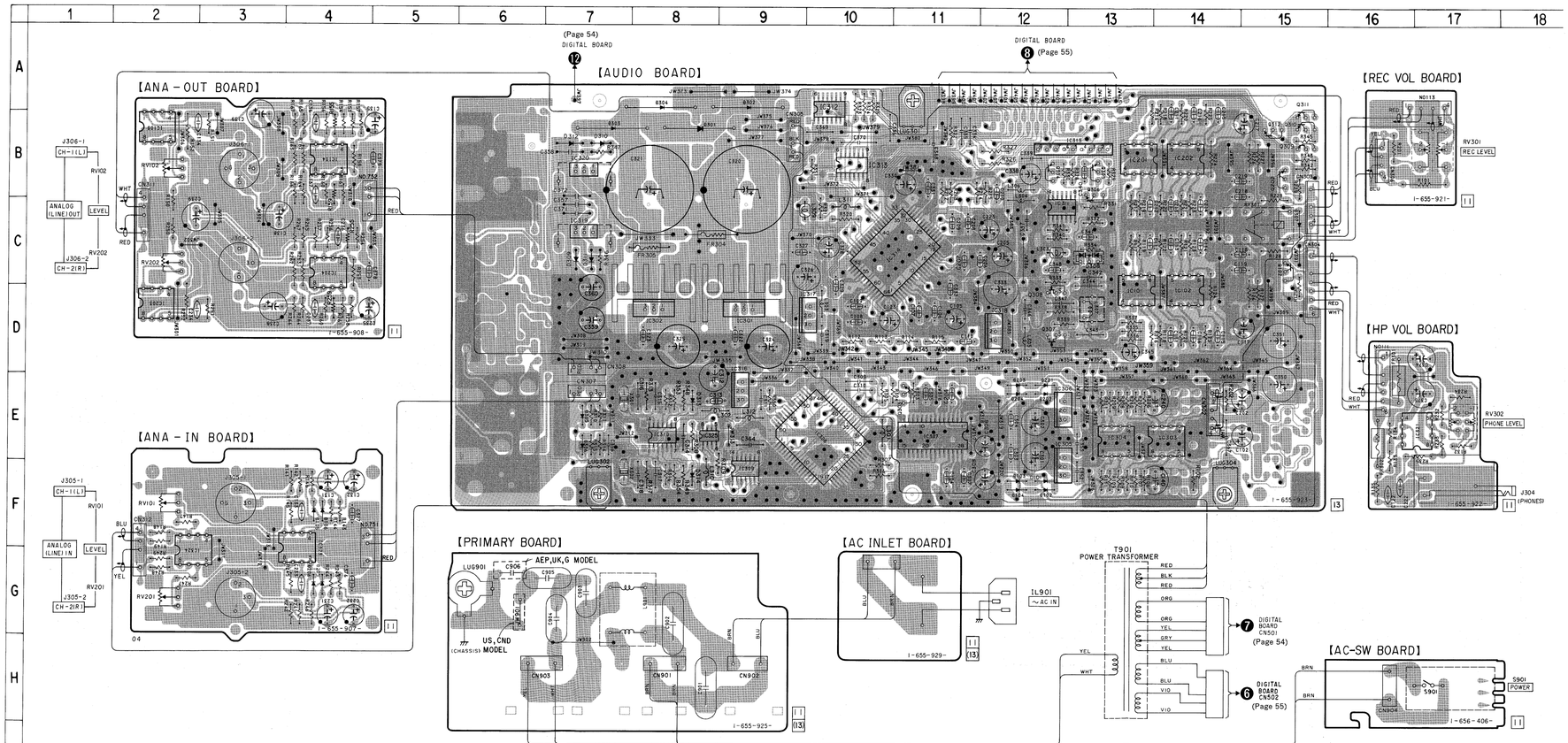
Note :
- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.

Note :	**Note :**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ⟨WW⟩ : fusible resistor.
- B+ : B+ Line
- B− : B− Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- no mark: PB
  ( ): REC
  ✕ : Impossible measurement point
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ▷ : PB
  ▷ : REC
- Abbreviation
  CND : Canadian model
  G : German model

4-13. SCHEMATIC DIAGRAM—AUDIO SECTION— • Refer to page 60 for Waveforms and Note.
• Refer to page 76 for IC Block Diagrams.





● Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D101	F-12	IC302	D-8
D102	F-12	IC303	E-14
D103	F-12	IC304	E-13
D104	F-12	IC305	E-12
D105	F-4	IC306	E-12
D106	F-4	IC307	E-11
D201	E-12	IC308	E-10
D202	E-12	IC309	F-9
D203	E-12	IC310	E-8
D204	E-12	IC311	C-12
D205	G-4	IC312	A-10
D206	G-4	IC313	B-10
D301	B-8	IC314	C-10
D302	A-9	IC315	B-13
D303	B-7	IC316	E-9
D304	A-8	IC317	D-9
D305	E-7	IC318	D-12
D306	E-7	IC319	C-7
D307	C-15	IC320	B-7
D308	C-13	IC321	E-16
D309	C-7	IC323	F-4
D310	B-7	IC324	G-3
D311	C-7	IC325	E-8
D312	B-7		
D313	E-8	Q102	C-15
D314	F-8	Q202	B-15
		Q303	E-11
IC101	D-13	Q304	B-12
IC102	D-14	Q305	B-13
IC103	B-2	Q306	B-13
IC104	B-4	Q307	D-12
IC201	B-13	Q308	D-12
IC202	B-14	Q309	B-15
IC203	D-2	Q310	B-15
IC204	C-4	Q311	B-15
IC301	D-9	Q312	B-15

Note :

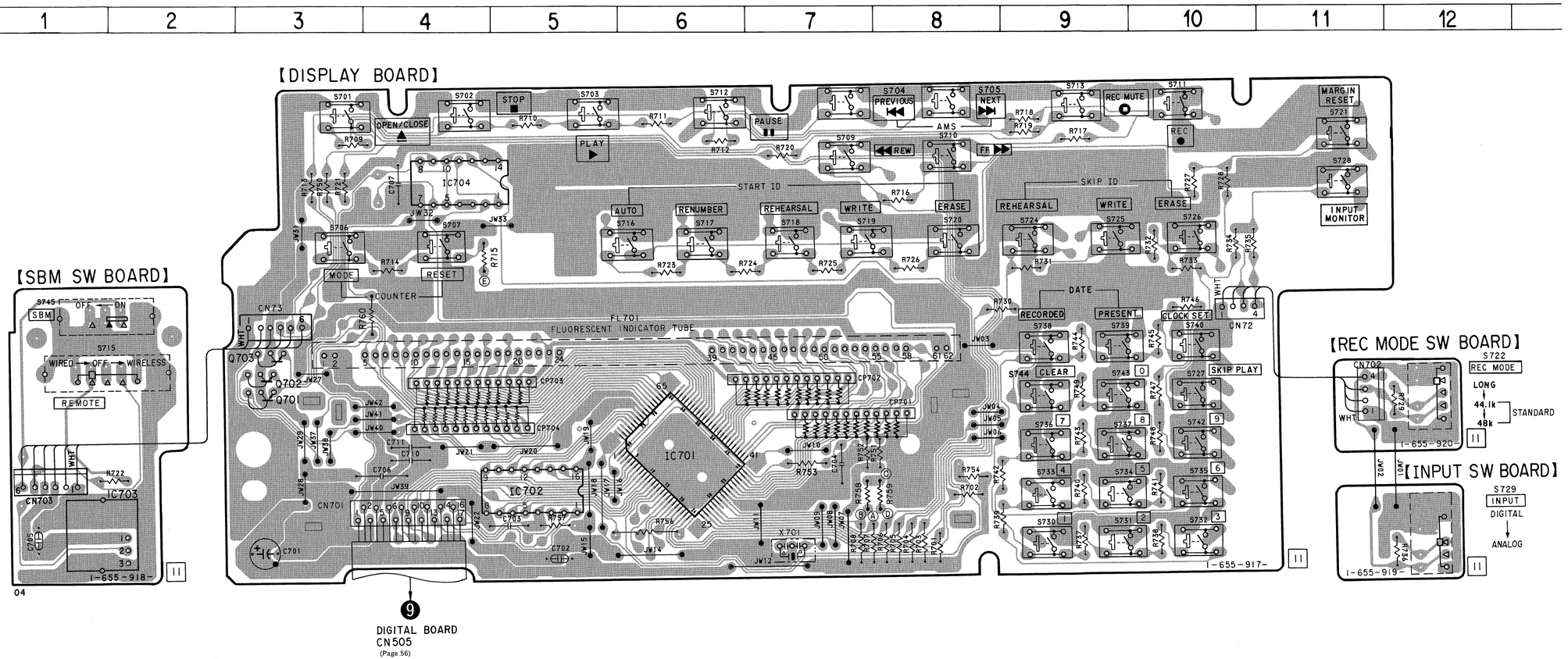
- ○— : parts extracted from the component side.
- ● : Through hole.
- ▬ : Pattern on the side which is seen.
- ▭ : Pattern on the rear side.
- Abbreviation
  CND : Canadian model
  G : German model

4-15. PRINTED WIRING BOARDS—PANEL SECTION—

● Semiconductor Location

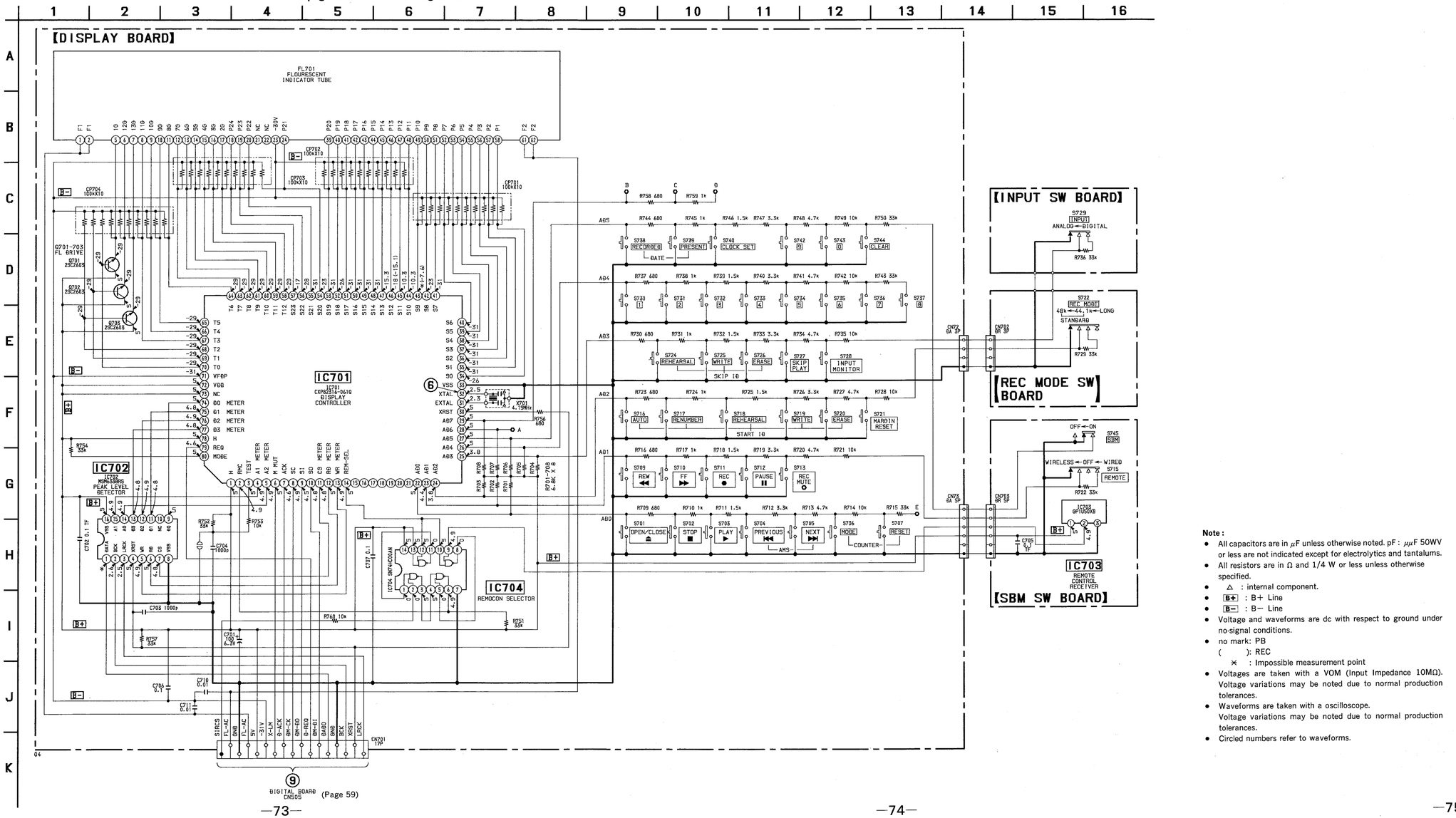
Ref. No.	Location
IC701	D-6
IC702	D-5
IC703	D-1
IC704	B-4
Q701	C-3
Q702	C-3
Q703	C-3

Note :
- ○— : parts extracted from the component side.
- ▨ : Pattern on the side which is seen.



4-16. SCHEMATIC DIAGRAM—PANEL SECTION—

• Refer to page 60 for Waveforms.
• Refer to page 76 for IC Block Diagrams.

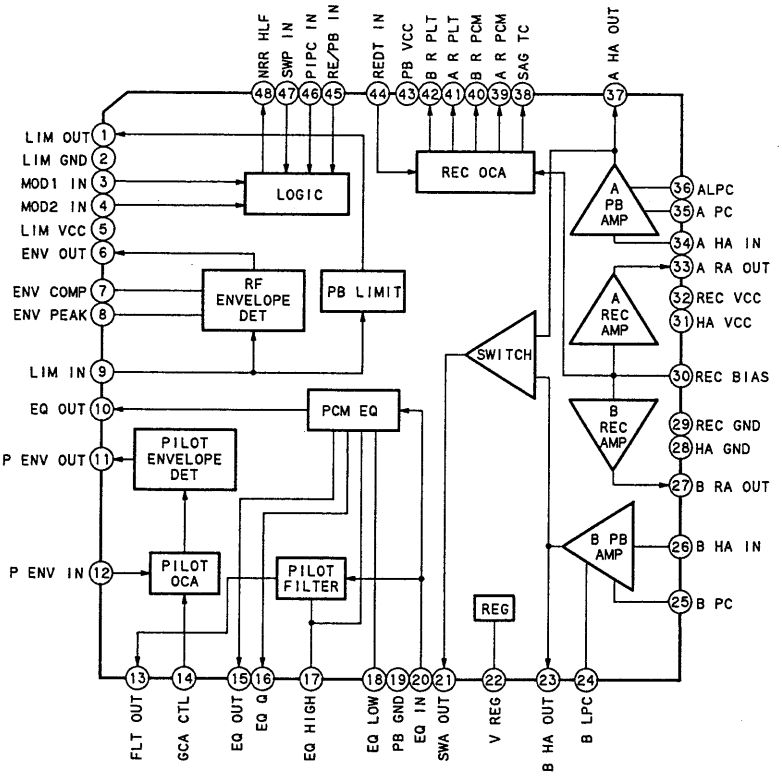


Note :

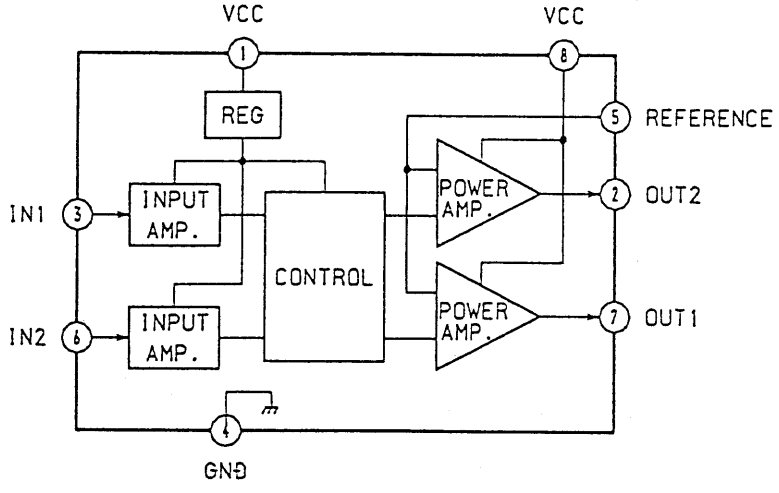
- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- B+ : B+ Line
- B− : B− Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- no mark: PB
  ( ): REC
  ✳ : Impossible measurement point
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.

• **IC Block Diagrams**

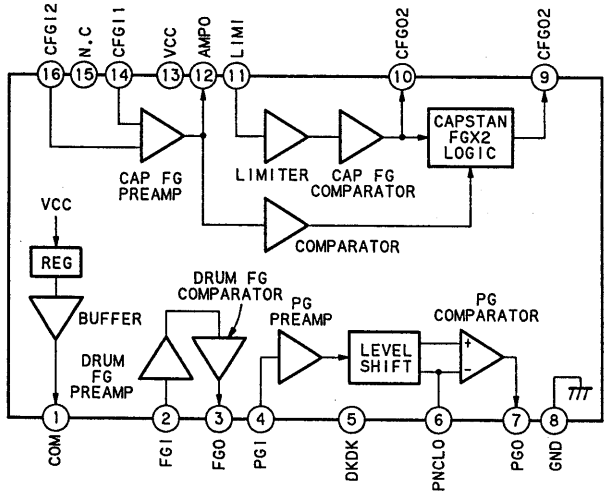
IC1, 51 CXA1364R



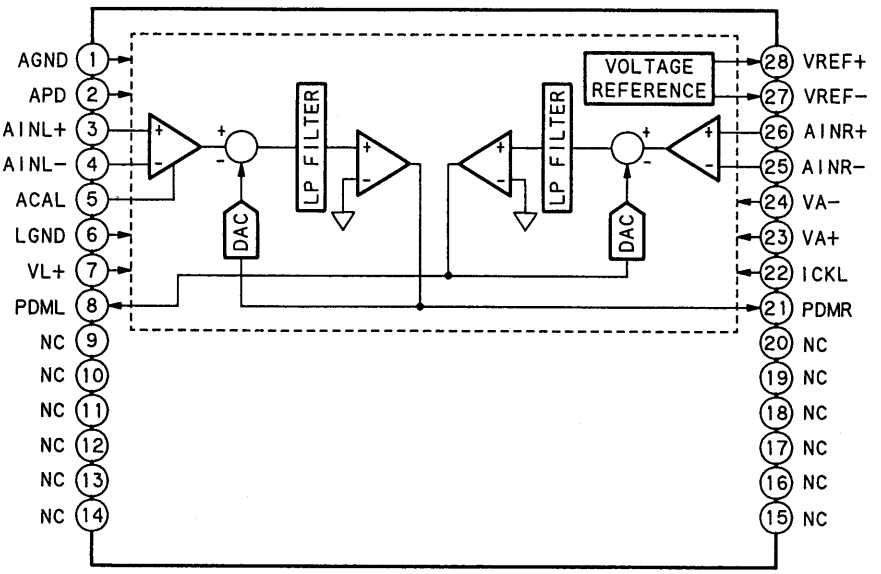
IC2, 523 M54641L



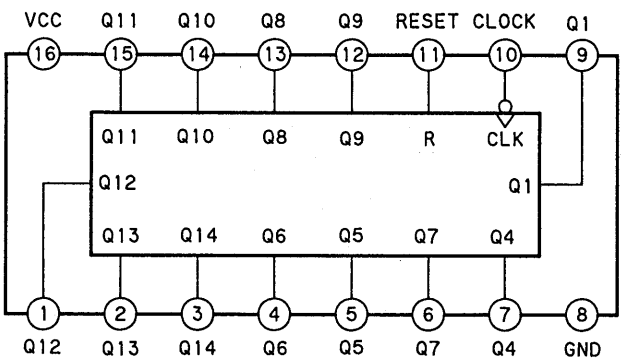
IC3 CX20115A



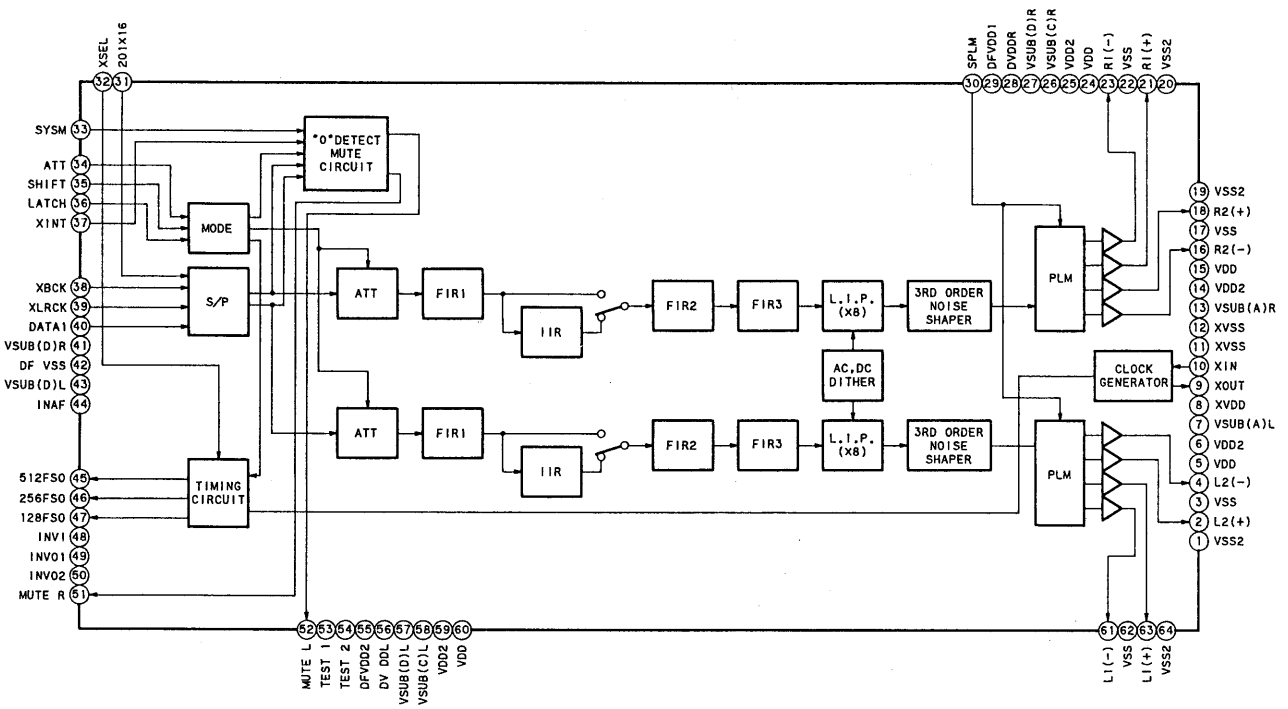
IC307 CXD8493M



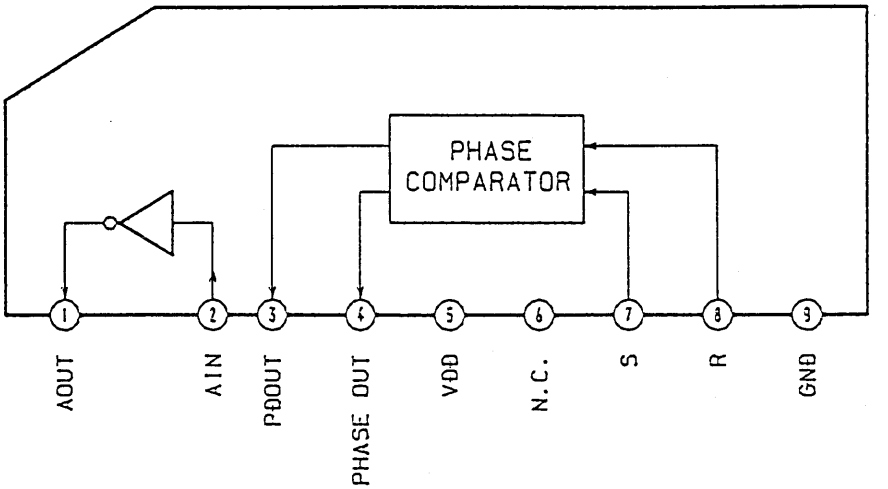
IC312 SN74HC4020ANS



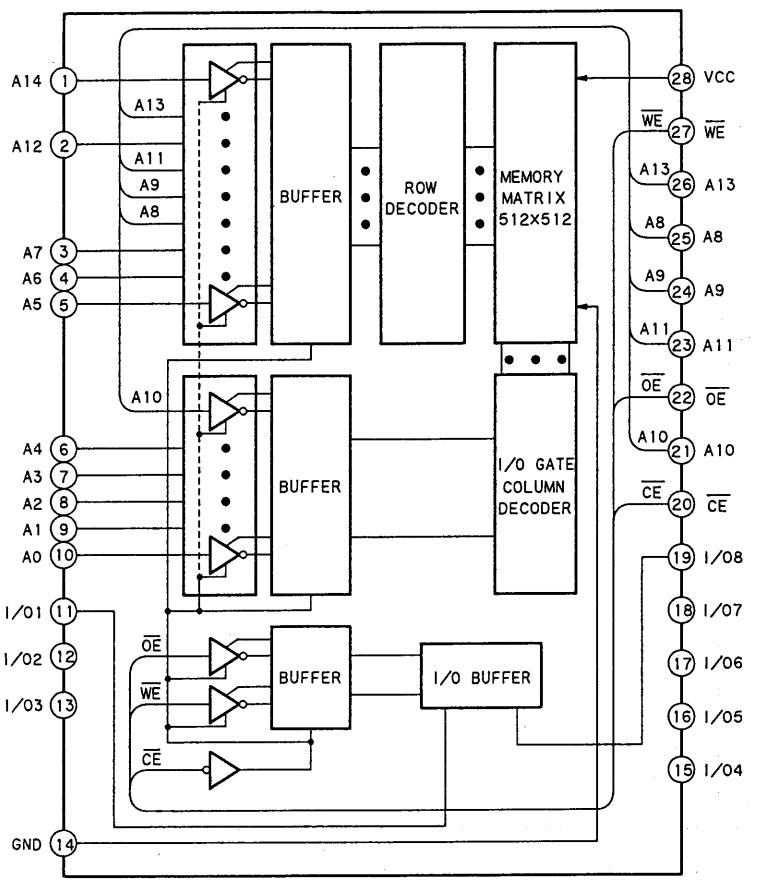
IC314 CXD8505Q



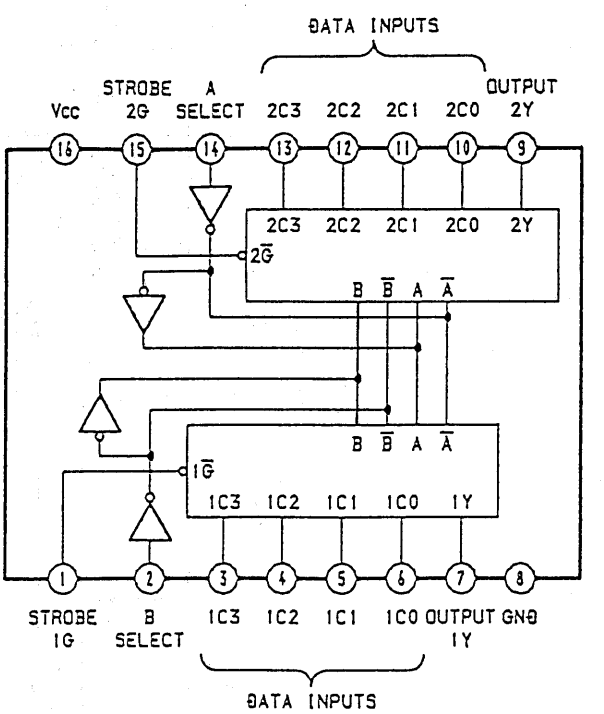
IC315 TC5081AP



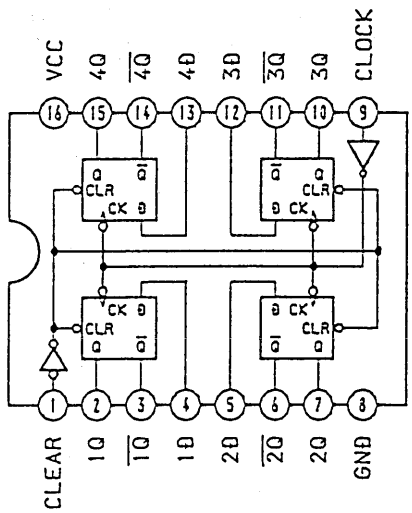
IC504, 804 CXK58257AM



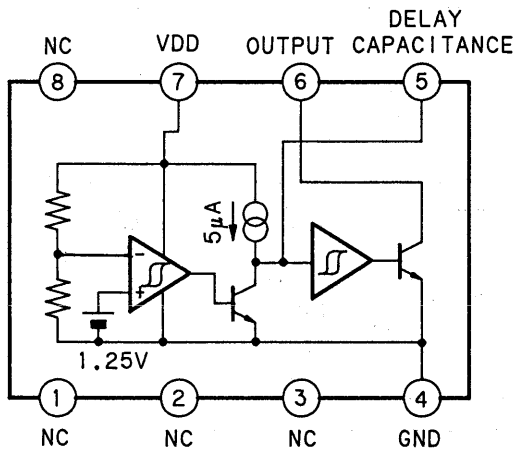
IC511 SN74HC153ANS



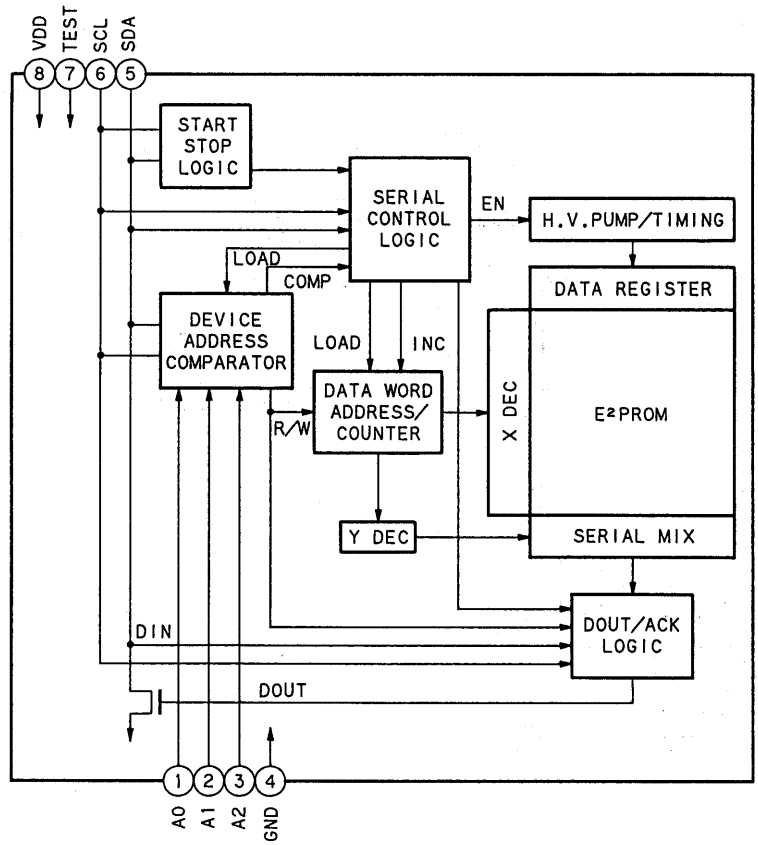
IC512 MC74HC175F



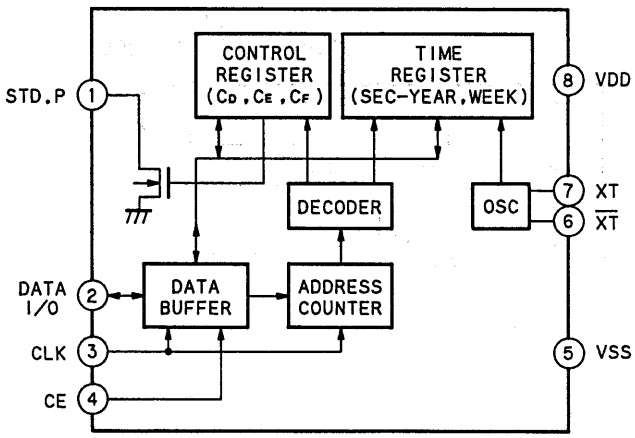
IC516 M51953BFP



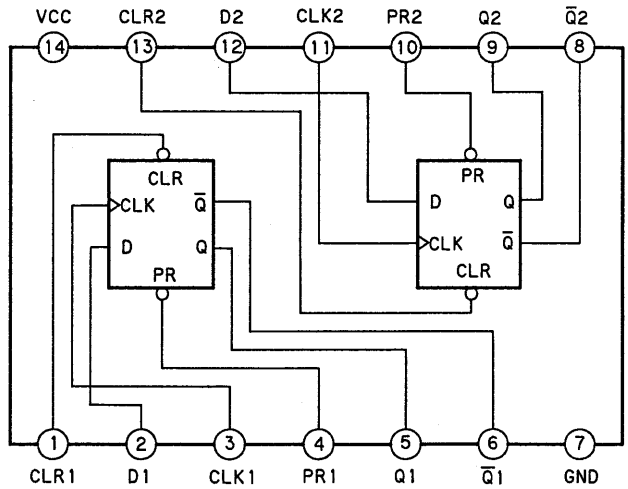
IC517 AT24C01A10SC



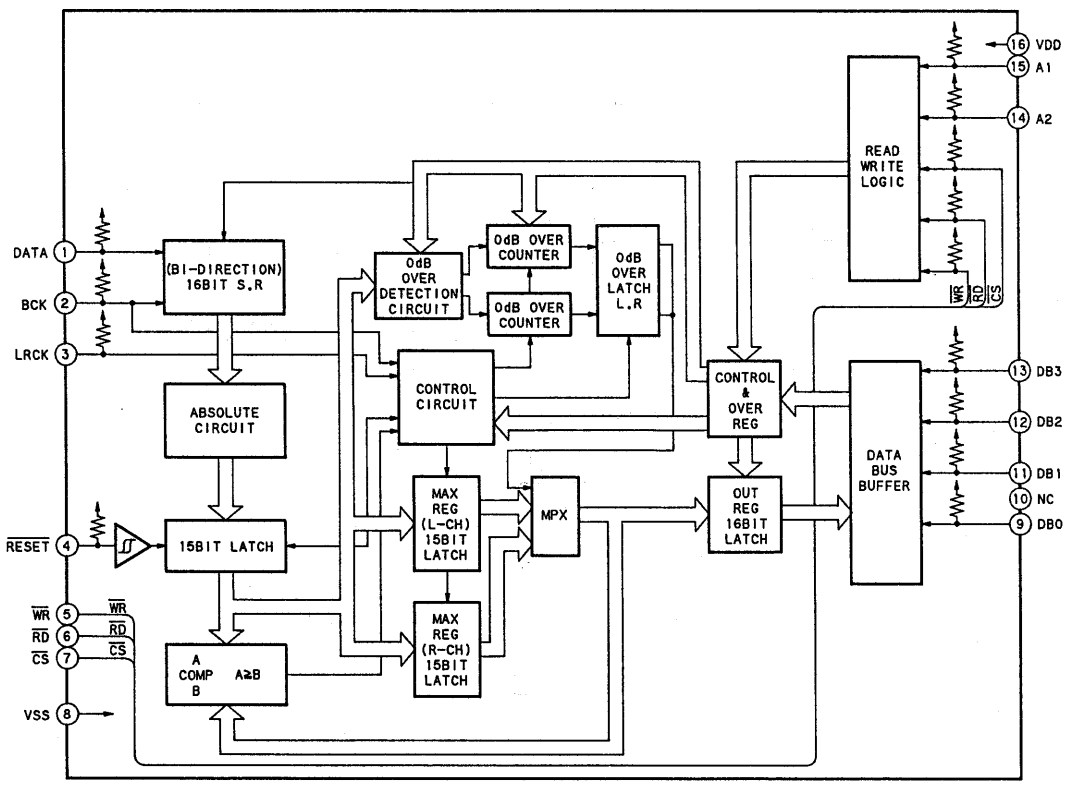
IC518 MSM6782-01MS



IC519 SN74HC74ANS



IC702 MSM6338RS



SECTION 5
EXPLODED VIEWS

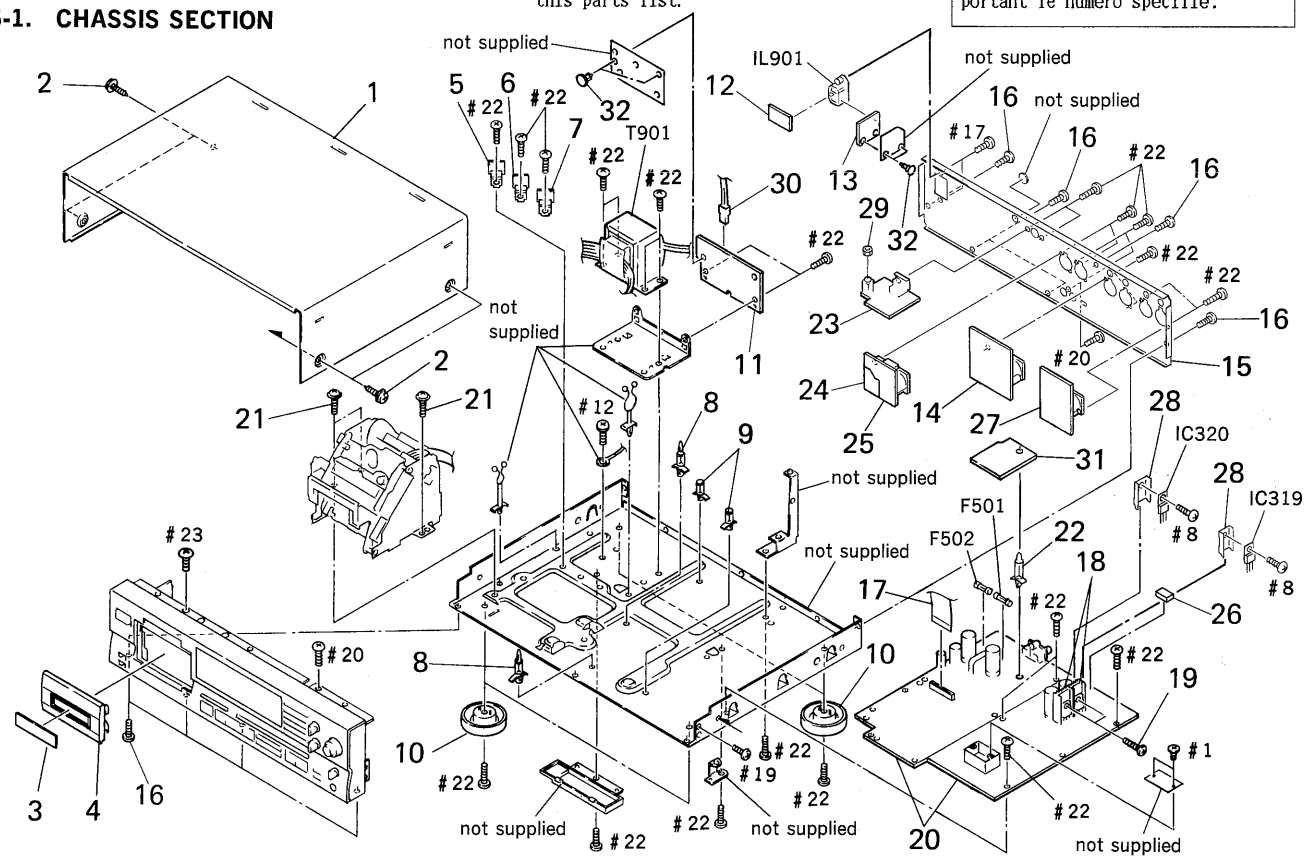
NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Abbreviation
  G : German model

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE)... (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

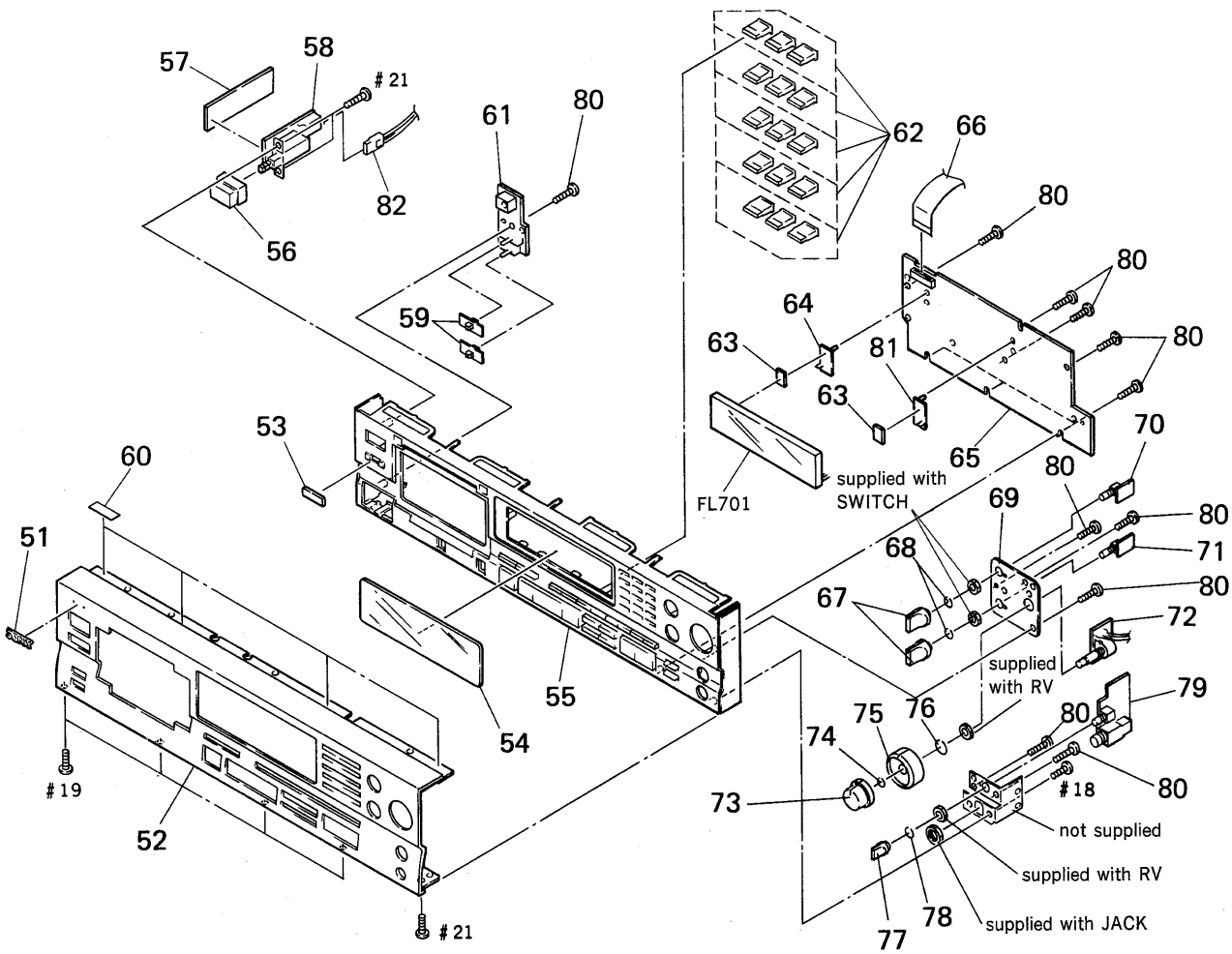
5-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
1	3-350-407-91	CASE	
2	3-704-366-21	SCREW (CASE) (M3X10)	
3	3-374-275-11	WINDOW (670)	
4	3-374-279-21	HOLDER (670)	
* 5	1-655-928-11	2V REG BOARD	
* 6	1-655-927-11	6V REG BOARD	
* 7	1-655-926-11	5V REG BOARD	
8	4-924-098-01	HOLDER, PC BOARD	
* 9	3-670-570-00	SPACER, SUPPORT	
10	4-956-885-01	FOOT (F58175S2W)	
* 11	1-655-925-11	PRIMARY BOARD	
* 12	1-655-931-11	COVER (A) BOARD	
* 13	1-655-929-11	AC INLET BOARD	
* 14	A-2007-373-A	ANA-OUT BOARD, COMPLETE	
* 15	3-921-939-41	PANEL, BACK (US, Canadian)	
* 15	3-921-939-51	PANEL, BACK (AEP, UK, G)	
16	3-703-685-21	SCREW (+BV 3X8)	
17	1-769-542-11	WIRE (FLAT TYPE) (31 CORE)	
* 18	4-363-146-71	HEAT SINK, V. OUT	
19	2-259-121-01	SCREW, TR	
* 20	A-2007-521-A	MAIN BOARD, COMPLETE (INCLUDING AUDIO AND DIGITAL BOARD) (US, Canadian)	
* 20	A-2007-522-A	MAIN BOARD, COMPLETE (INCLUDING AUDIO AND DIGITAL BOARD) (AEP, UK, G)	

Ref. No.	Part No.	Description	Remark
21	4-886-821-11	SCREW, S TIGHT, +PTTWH 3X6	
* 22	4-954-051-41	HOLDER, PC BOARD	
* 23	1-655-911-11	REMOTE BOARD	
* 24	1-655-910-11	DIG-OUT BOARD	
* 25	1-655-909-11	DIG-IN BOARD	
* 26	4-911-041-01	CUSHION, RUBBER	
* 27	1-655-907-11	ANA-IN BOARD	
* 28	3-309-144-21	HEAT SINK	
29	3-926-375-01	NUT (M8X0.75)	
30	1-775-047-11	CORD (WITH CONNECTOR)	
* 31	A-2007-471-A	SP BOARD, COMPLETE	
32	4-812-134-11	RIVET (DIA. 3.5), NYLON (G)	
⚠F501	1-532-286-00	FUSE (T2.5A/250V) (AEP, UK, G)	
⚠F501	1-576-105-11	FUSE (2.5A/250V) (US, Canadian)	
⚠F502	1-532-286-00	FUSE (T2.5A/250V) (AEP, UK, G)	
⚠F502	1-576-105-11	FUSE (2.5A/250V) (US, Canadian)	
IC319	8-759-143-11	IC uPC24M12HF	
IC320	8-759-333-80	IC LM2990T-12	
⚠IL901	1-251-234-11	INLET, AC (~ AC IN)	
⚠T901	1-427-912-11	TRANSFORMER, POWER (US, Canadian)	
⚠T901	1-427-913-11	TRANSFORMER, POWER (AEP, UK, G)	

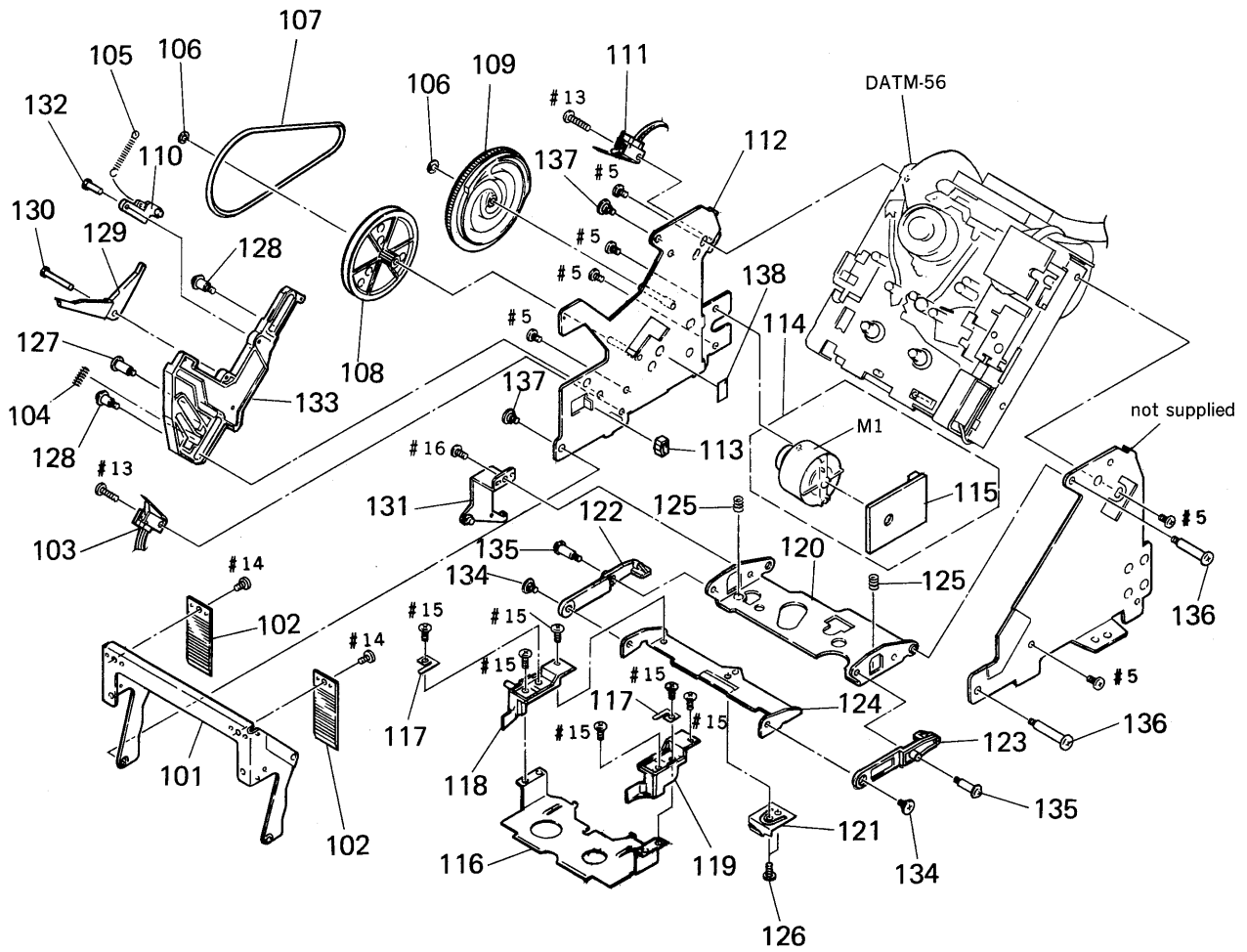
5-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	4-942-568-01	EMBLEM (NO. 5), SONY	
52	3-368-713-71	PANEL (FRONT)	
53	3-364-919-01	FILTER	
54	3-368-698-01	WINDOW (FL TUBE)	
55	X-3369-935-1	ESCUTCHEON (PANEL) ASSY	
56	4-917-460-72	KNOB, POWER	
* 57	1-656-407-11	COVER (B) BOARD	
* 58	1-656-406-11	AC-SW BOARD	
59	3-382-651-01	KNOB	
60	3-831-441-XX	CUSHION, SPEAKER	
* 61	1-655-918-11	SBM SW BOARD	
62	3-364-927-21	BUTTON (10 KEY)	
63	2-389-320-01	CUSHION	
* 64	4-922-523-01	HOLDER (RIGHT)	
* 65	A-2007-367-A	DISPLAY BOARD, COMPLETE	
66	1-769-541-11	WIRE (FLAT TYPE) (17 CORE)	
67	4-908-097-21	KNOB	

Ref. No.	Part No.	Description	Remark
68	3-350-440-01	SPRING	
* 69	3-920-796-01	BRACKET (REC VOL)	
* 70	1-655-919-11	INPUT SW BOARD	
* 71	1-655-920-11	REC MODE SW BOARD	
* 72	1-655-921-11	REC VOL BOARD	
73	3-382-635-01	KNOB (REC-R)	
74	3-356-957-01	SPRING	
75	3-382-634-01	KNOB (REC-L)	
76	3-382-627-01	SPRING, RING	
77	3-354-931-01	KNOB (DIA. 10)	
78	3-354-981-01	SPRING (SUS), RING	
* 79	1-655-922-11	HP VOL BOARD	
80	4-951-620-01	SCREW (2.6X8), +BVTP	
* 81	4-922-524-01	HOLDER (LEFT)	
82	1-775-048-11	CORD (WITH CONNECTOR)	
FL701	1-517-382-11	INDICATOR TUBE, FLUORESCENT	

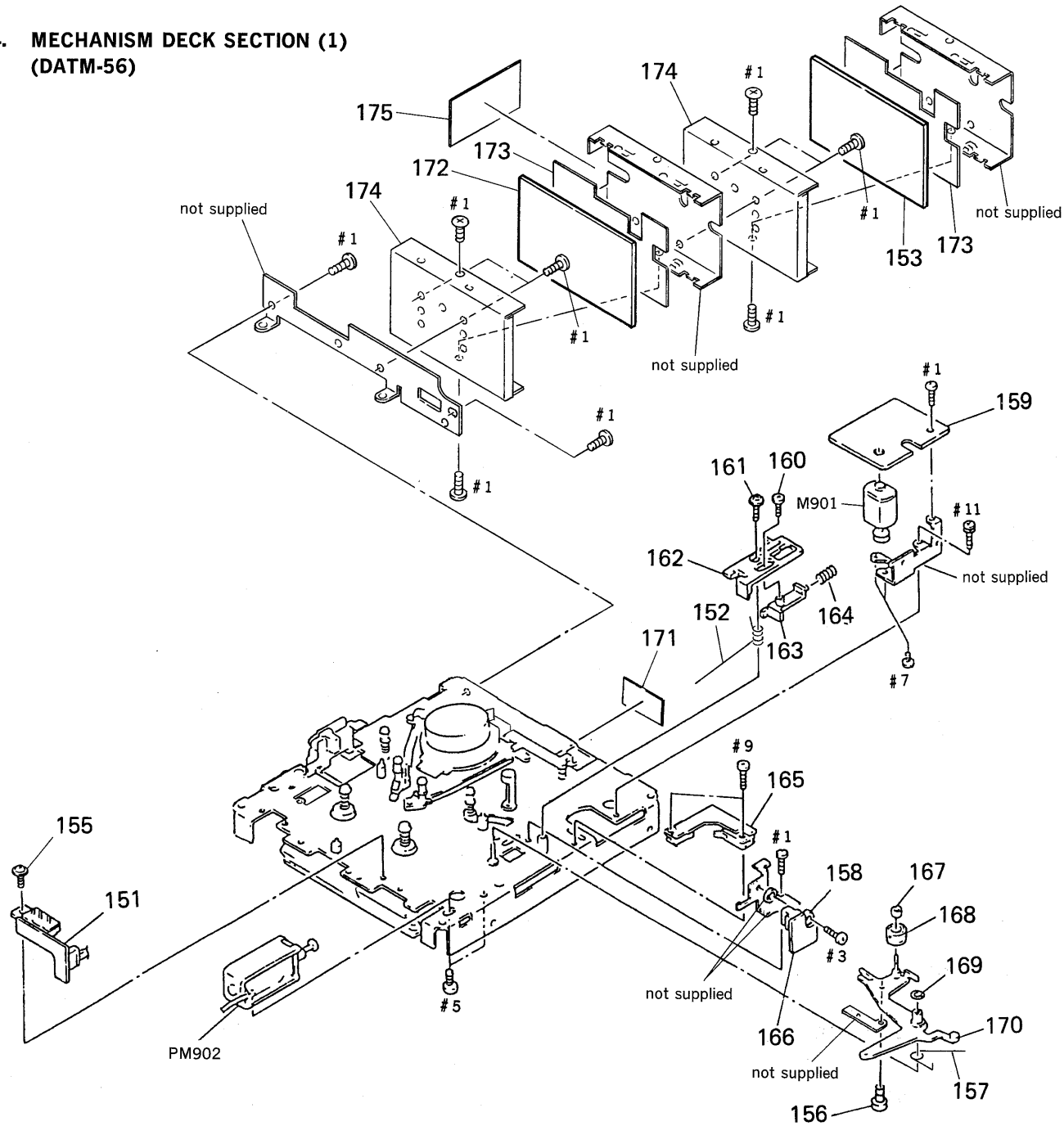
5-3. CASSETTE COMPARTMENT SECTION



Ref. No.	Part No.	Description	Remark
101	4-931-474-01	HOLDER (WINDOW)	
102	4-931-469-01	PLATE, ORNAMENTAL	
* 103	1-655-915-11	SW (OUT) BOARD	
104	3-537-215-00	SPRING, COMPRESSION	
105	3-549-810-00	SPRING, TENSION	
106	3-307-948-21	WASHER, NYLON	
107	4-931-470-01	BELT (DRIVING)	
108	4-931-459-01	PULLEY	
109	4-931-477-01	GEAR (CAM)	
110	4-931-460-01	ARM (SLIDER)	
* 111	1-655-914-11	SW (IN) BOARD	
* 112	X-4919-023-1	PLATE ASSY, SIDE	
113	4-887-175-00	RUBBER, STOPPER	
114	A-2003-448-A	MOTOR ASSY, CASSETTE COMPARTMENT	
* 115	1-655-913-11	MOTOR BOARD	
116	4-931-476-01	HOLDER (LOWER)	
117	3-366-308-01	SPRING (SIDE), PLATE	
118	4-931-484-01	HOLDER (C-LEFT)	
119	4-931-486-01	HOLDER (C-RIGHT)	
* 120	3-369-235-01	PLATE, FULCRUM	

Ref. No.	Part No.	Description	Remark
121	4-931-461-01	SPRING (CENTER), LEAF	
122	4-931-481-01	ARM (LIMITER L)	
123	4-931-473-01	ARM (LIMITER R)	
* 124	4-931-485-01	HOLDER (C-INNER)	
125	3-537-214-00	SPRING, COMPRESSION	
126	3-352-517-01	SCREW (M2X2.5)	
127	4-931-471-01	SCREW (STEP)	
128	4-932-336-01	SCREW (STEP)	
129	4-931-490-01	LEVER (LINK)	
130	4-931-468-01	SHAFT (PRESS FITTING)	
* 131	X-4919-020-1	JOINT ASSY	
132	4-936-626-01	SHAFT (ARM PRESS FITTING)	
133	4-931-492-01	SLIDER (CAM)	
134	3-312-161-00	SCREW, STEP, PRECISION	
135	4-918-991-01	SCREW, STEP	
136	4-931-463-01	SCREW (STEP)	
137	2-236-956-00	SCREW, STEP	
138	3-846-312-01	SPACER	
M1	A-2003-660-A	MOTOR ASSY (CASSETTE COMPARTMENT)	

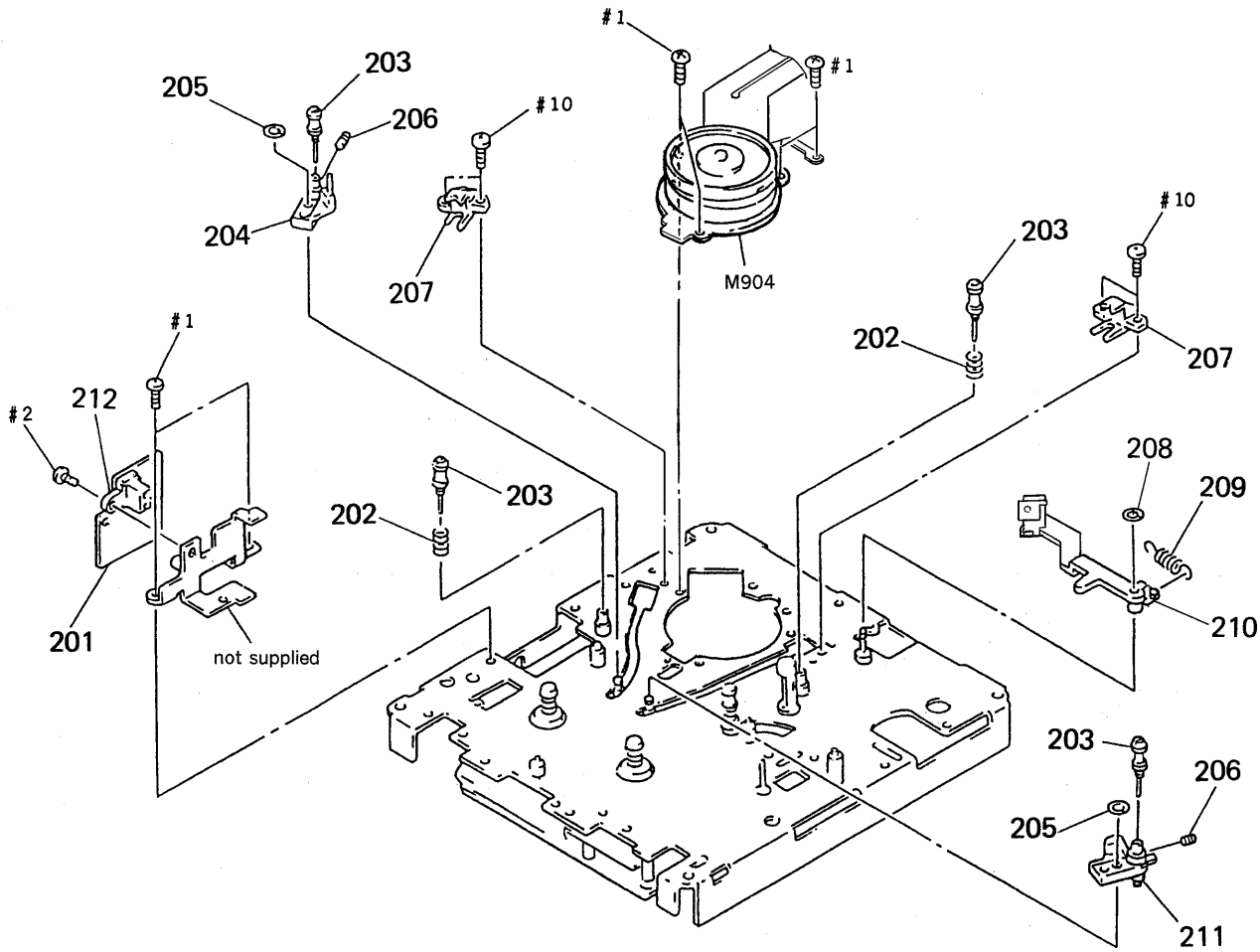
5-4. MECHANISM DECK SECTION (1) (DATM-56)



Ref. No.	Part No.	Description	Remark
* 151	1-654-393-11	REC-EN BOARD	
152	3-931-541-01	SPRING (PINCH)	
* 153	A-2006-561-A	RF AMP BOARD, COMPLETE	
155	3-321-041-01	SCREW (M1.7X3.5), TAPPING	
156	3-704-244-01	SCREW (P1.7X1.6)	
157	3-367-352-01	SPRING (PINCH)	
158	A-2004-299-A	DETECTION (R) ASSY, E	
* 159	1-655-286-11	LOADING-MOT BOARD	
160	2-623-756-01	SCREW, (B1.7X3), TAPPING	
161	3-703-502-11	SCREW	
162	3-362-148-01	SLIDER (PINCH)	
163	3-362-149-01	SLIDER (LIMITTER)	
164	3-564-035-00	SPRING, COMPRESSION	

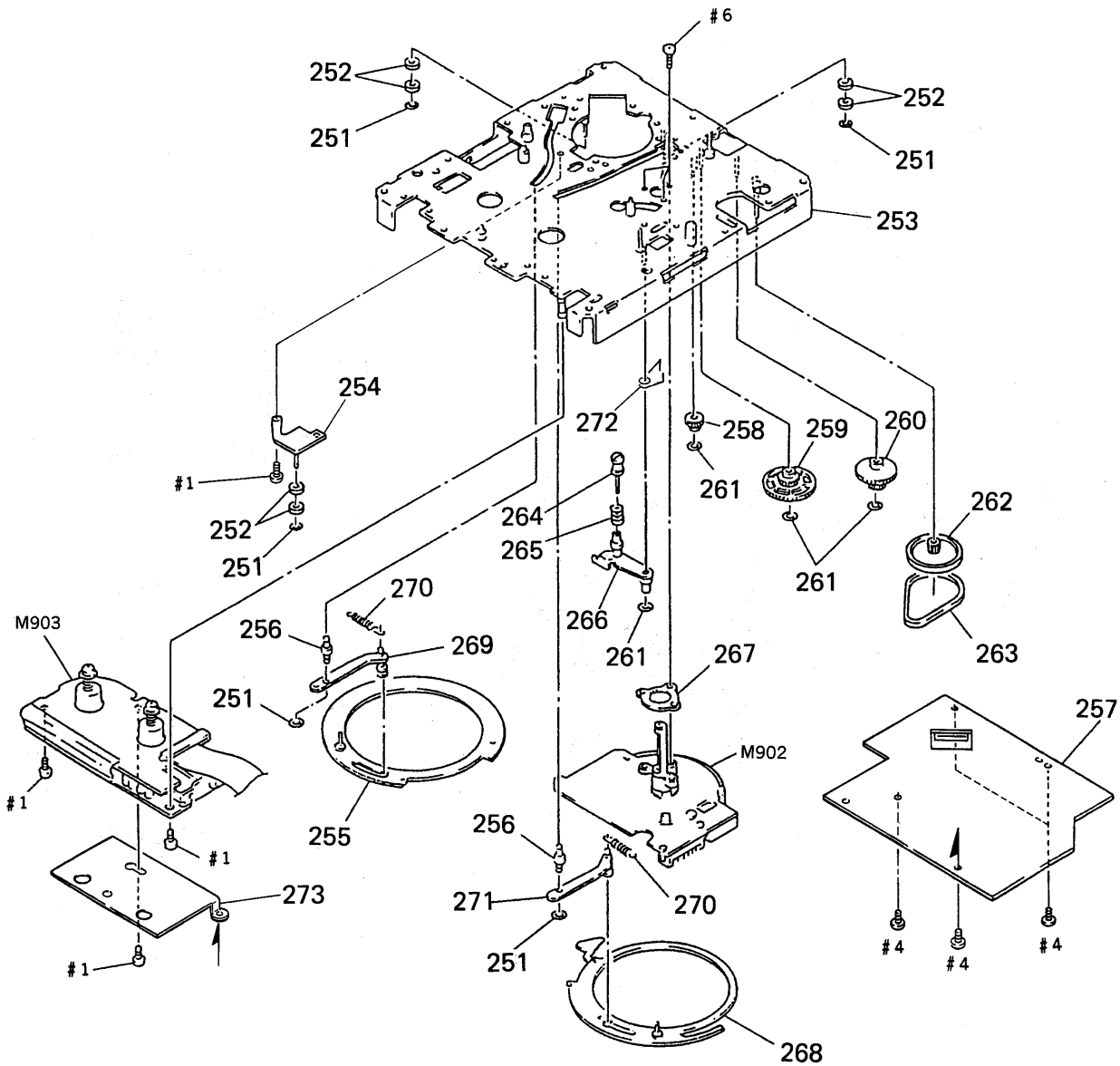
Ref. No.	Part No.	Description	Remark
* 165	1-655-285-11	LOAD-SW BOARD	
* 166	1-654-391-11	T-END BOARD	
167	3-337-626-01	CAP, PINCH ROLLER	
168	X-3337-610-1	PINCH ROLLER ASSY	
169	3-701-436-11	WASHER, STOPPER	
170	X-3362-021-1	LEVER (PINCH ROLLER) ASSY	
171	3-366-886-01	SHEET (RF BRACKET)	
* 172	A-2006-207-A	AMPLIFIER BOARD, COMPLETE	
* 173	3-362-537-01	SHEET (RF)	
* 174	3-337-686-11	CASE (LOWER), SHIELD	
* 175	3-914-656-01	SHEET (RF FLEXIBLE)	
M901	A-2004-301-A	MOTOR ASSY, CONTROL	
PM902	1-454-522-11	SOLENOID, PLUNGER	

5-5. MECHANISM DECK SECTION (2) (DATM-56)



Ref. No.	Part No.	Description	Remark
* 201	1-654-392-11	S-END BOARD	
202	3-573-470-00	SPRING, COMPRESSION	
203	X-3337-643-1	GUIDE (RIC) ASSY, ROLLER	
204	X-3362-028-1	SLANT BLOCK (L2) ASSY	
205	3-341-752-11	WASHER, POLYETHYLENE	
206	3-362-152-01	SCREW (RETURN GUIDE BOSS)	
207	3-912-011-01	CATCHER	
208	3-701-436-11	WASHER, STOPPER	
209	3-929-804-01	SPRING, TENSION	
210	X-3371-230-1	LEVER (CLEANER) ASSY	
211	X-3362-029-1	SLANT BLOCK (R2) ASSY	
212	A-2004-550-A	DETECTION (L) ASSY, E	
M904	8-848-549-11	DRUM ASSY DOU-15A	

5-6. MECHANISM DECK SECTION (3) (DATM-56)



Ref. No.	Part No.	Description	Remark
251	3-559-408-11	WASHER, POLYETHYLENE, DIA. 1.2	
252	3-337-622-01	ROLLER, RING	
* 253	X-3362-030-7	CHASSIS ASSY	
254	X-3370-186-1	ARM (RING ROLLER) ASSY	
255	X-3369-705-1	RING (L) ASSY, LOADING	
256	3-362-151-01	BOSS (GUIDE)	
* 257	A-2007-321-A	DRUM DRIVE BOARD, COMPLETE	
258	3-372-619-01	GEAR	
259	3-345-181-01	GEAR (LOADING A)	
260	3-362-155-01	GEAR (A)	
261	3-701-436-11	WASHER, STOPPER	
262	4-932-338-01	PULLEY (A)	
263	4-913-325-01	BELT, TAKE-UP	

Ref. No.	Part No.	Description	Remark
264	X-3337-643-1	GUIDE (RIC) ASSY, ROLLER	
265	3-573-470-00	SPRING, COMPRESSION	
* 266	X-3362-020-1	LEVER (F GUIDE) ASSY	
* 267	3-362-156-01	BRACKET (CAPSTAN)	
268	X-3362-204-1	GEAR (LOAD) ASSY	
* 269	X-3362-024-1	LEVER (LOADING L) ASSY	
270	3-337-653-01	SPRING, TENSION	
* 271	X-3362-025-1	LEVER (LOADING R) ASSY	
272	3-375-034-01	SPRING (F GUIDE)	
* 273	3-929-801-01	BRACKET (MD PC BOARD)	
M902	8-835-306-01	MOTOR, DC U-17A (CAPSTAN)	
* M903	8-835-205-01	MOTOR, DC U-2A (REEL) (INCLUDING PM901)	

SECTION 6
ELECTRICAL PARTS LIST

2V REG **5V REG** **6V REG** **AC INLET** **AC-SW** **AMPLIFIER**

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Abbreviation
  G : German model
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u:μ, for example:
  uA..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH

When indicating parts by reference number, please include the board.

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
*	1-655-928-11	2V REG BOARD			
		**********			
		< CAPACITOR >			
C911	1-162-294-31	CERAMIC	0.001uF	10% 50V	
		< TRANSISTOR >			
Q901	8-729-209-15	TRANSISTOR 2SD2012			
**********					
*	1-655-926-11	5V REG BOARD			
		**********			
		< CAPACITOR >			
C907	1-164-159-11	CERAMIC	0.1uF	50V	
C908	1-164-159-11	CERAMIC	0.1uF	50V	
		< IC >			
IC901	8-759-144-82	IC uPC2405HF			
**********					
*	1-655-927-11	6V REG BOARD			
		**********			
		< CAPACITOR >			
C909	1-164-159-11	CERAMIC	0.1uF	50V	
C910	1-164-159-11	CERAMIC	0.1uF	50V	
		< IC >			
IC902	8-759-148-79	IC uPC2406HF			
**********					
*	1-655-929-11	AC INLET BOARD			
		**********			
		< AC INLET >			
⚠IL901	1-251-234-11	INLET, AC (~ AC IN)			
**********					

Ref. No.	Part No.	Description			Remark
*	1-656-406-11	AC-SW BOARD			
		**********			
		< CONNECTOR >			
CN904	1-770-550-11	PIN, CONNECTOR (PC BOARD) 2P			
		< SWITCH >			
⚠S901	1-572-267-51	SWITCH, PUSH (AC POWER) (1 KEY) (POWER)			
**********					
*	A-2006-207-A	AMPLIFIER BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C51	1-124-779-00	ELECT CHIP	10uF	20% 16V	
C52	1-163-251-11	CERAMIC CHIP	100PF	5% 50V	
C53	1-162-638-11	CERAMIC CHIP	1uF	16V	
C54	1-164-299-11	CERAMIC CHIP	0.22uF	10% 25V	
C55	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V	
C57	1-124-779-00	ELECT CHIP	10uF	20% 16V	
C58	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V	
C59	1-164-299-11	CERAMIC CHIP	0.22uF	10% 25V	
C60	1-162-638-11	CERAMIC CHIP	1uF	16V	
C61	1-163-251-11	CERAMIC CHIP	100PF	5% 50V	
C62	1-124-779-00	ELECT CHIP	10uF	20% 16V	
C63	1-163-005-11	CERAMIC CHIP	470PF	10% 50V	
C64	1-163-005-11	CERAMIC CHIP	470PF	10% 50V	
C66	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V	
C69	1-124-779-00	ELECT CHIP	10uF	20% 16V	
C70	1-163-038-00	CERAMIC CHIP	0.1uF	25V	
C71	1-164-005-11	CERAMIC CHIP	0.47uF	25V	
C72	1-163-038-00	CERAMIC CHIP	0.1uF	25V	
		< CONNECTOR >			
CN51	1-569-349-11	CONNECTOR, F.P.C 6P			
* CN52	1-564-725-11	PIN, CONNECTOR (SMALL TYPE) 9P			
		< IC >			
IC51	8-752-039-01	IC CXA1364R			

AMPLIFIER | ANA-IN | ANA-OUT

Ref. No.	Part No.	Description			Remark
		< COIL >			
L51	1-408-781-00	INDUCTOR CHIP	22uH		
L52	1-408-789-21	INDUCTOR CHIP	100uH		
L53	1-408-781-00	INDUCTOR CHIP	22uH		
		< TRANSISTOR >			
Q51	8-729-805-45	TRANSISTOR	2SC3395		
Q52	8-729-805-45	TRANSISTOR	2SC3395		
Q53	8-729-805-45	TRANSISTOR	2SC3395		
Q54	8-729-805-45	TRANSISTOR	2SC3395		
Q55	8-729-805-45	TRANSISTOR	2SC3395		
		< RESISTOR >			
R51	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R52	1-216-077-00	METAL CHIP	15K	5%	1/10W
R53	1-216-077-00	METAL CHIP	15K	5%	1/10W
R54	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R55	1-216-083-00	METAL CHIP	27K	5%	1/10W
R56	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R57	1-216-084-00	METAL CHIP	30K	5%	1/10W
R58	1-216-085-00	METAL CHIP	33K	5%	1/10W
R59	1-216-085-00	METAL CHIP	33K	5%	1/10W
R60	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R61	1-216-075-00	METAL CHIP	12K	5%	1/10W
R62	1-216-077-00	METAL CHIP	15K	5%	1/10W
R63	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
**********					
*	1-655-907-11	ANA-IN BOARD			
		**********			
		< CAPACITOR >			
C131	1-126-051-11	ELECT	47uF	20%	50V
C132	1-126-051-11	ELECT	47uF	20%	50V
C133	1-107-597-11	CERAMIC	22PF	10%	500V
C231	1-126-051-11	ELECT	47uF	20%	50V
C232	1-126-051-11	ELECT	47uF	20%	50V
C233	1-107-597-11	CERAMIC	22PF	10%	500V
C376	1-136-165-00	FILM	0.1uF	5%	50V
C377	1-136-165-00	FILM	0.1uF	5%	50V
		< CONNECTOR >			
CN312	1-691-766-31	PLUG (MICRO CONNECTOR) 4P			
		< DIODE >			
D105	8-719-987-63	DIODE	1N4148M		
D106	8-719-987-63	DIODE	1N4148M		
D205	8-719-987-63	DIODE	1N4148M		
D206	8-719-987-63	DIODE	1N4148M		

Ref. No.	Part No.	Description			Remark
		< IC >			
IC323	8-759-981-96	IC	RC4560D		
IC324	8-759-981-96	IC	RC4560D		
		< CONNECTOR >			
J305	1-750-786-11	CONNECTOR (XLR TYPE) 3P (ANALOG(LINE) IN)			
		< RESISTOR >			
R141	1-215-469-00	METAL	100K	1%	1/4W
R142	1-215-469-00	METAL	100K	1%	1/4W
R143	1-215-453-00	METAL	22K	1%	1/4W
R144	1-215-453-00	METAL	22K	1%	1/4W
R145	1-215-445-00	METAL	10K	1%	1/4W
R146	1-215-445-00	METAL	10K	1%	1/4W
R147	1-215-417-00	METAL	680	1%	1/4W
R148	1-215-425-00	METAL	1.5K	1%	1/4W
R149	1-215-397-00	METAL	100	1%	1/4W
R241	1-215-469-00	METAL	100K	1%	1/4W
R242	1-215-469-00	METAL	100K	1%	1/4W
R243	1-215-453-00	METAL	22K	1%	1/4W
R244	1-215-453-00	METAL	22K	1%	1/4W
R245	1-215-445-00	METAL	10K	1%	1/4W
R246	1-215-445-00	METAL	10K	1%	1/4W
R247	1-215-417-00	METAL	680	1%	1/4W
R248	1-215-425-00	METAL	1.5K	1%	1/4W
R249	1-215-397-00	METAL	100	1%	1/4W
		< VARIABLE RESISTOR >			
RV101	1-223-877-11	RES, VAR, CARBON 10K (LEVEL CH-1(L), ANALOG(LINE) IN)			
RV201	1-223-877-11	RES, VAR, CARBON 10K (LEVEL CH-2(R), ANALOG(LINE) IN)			
**********					
*	A-2007-373-A	ANA-OUT BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C134	1-107-597-11	CERAMIC	22PF	10%	500V
C135	1-126-051-11	ELECT	47uF	20%	50V
C136	1-107-597-11	CERAMIC	22PF	10%	500V
C137	1-107-597-11	CERAMIC	22PF	10%	500V
C138	1-126-024-11	ELECT	220uF	20%	25V
C139	1-126-024-11	ELECT	220uF	20%	25V
C234	1-107-597-11	CERAMIC	22PF	10%	500V
C235	1-126-051-11	ELECT	47uF	20%	50V
C236	1-107-597-11	CERAMIC	22PF	10%	500V
C237	1-107-597-11	CERAMIC	22PF	10%	500V

Ref. No.	Part No.	Description			Remark
C238	1-126-024-11	ELECT	220uF	20%	25V
C239	1-126-024-11	ELECT	220uF	20%	25V
C378	1-136-165-00	FILM	0.1uF	5%	50V
C379	1-136-165-00	FILM	0.1uF	5%	50V
		< CONNECTOR >			
CN311	1-691-766-11	PLUG (MICRO CONNECTOR) 4P			
		< IC >			
IC103	8-759-981-96	IC RC4560D			
IC104	8-759-981-96	IC RC4560D			
IC203	8-759-981-96	IC RC4560D			
IC204	8-759-981-96	IC RC4560D			
		< CONNECTOR >			
J306	1-750-785-11	CONNECTOR (XLR TYPE) 3P (ANALOG(LINE) OUT)			
		< RESISTOR >			
R150	1-215-421-00	METAL	1K	1%	1/4W
R151	1-215-429-00	METAL	2.2K	1%	1/4W
R152	1-215-445-00	METAL	10K	1%	1/4W
R153	1-215-445-00	METAL	10K	1%	1/4W
R154	1-215-473-00	METAL	150K	1%	1/4W
R156	1-215-453-00	METAL	22K	1%	1/4W
R157	1-215-445-00	METAL	10K	1%	1/4W
R158	1-215-446-00	METAL	11K	1%	1/4W
R160	1-215-457-00	METAL	33K	1%	1/4W
R161	1-215-445-00	METAL	10K	1%	1/4W
R162	1-215-401-11	METAL	150	1%	1/4W
R163	1-215-401-11	METAL	150	1%	1/4W
R164	1-215-445-00	METAL	10K	1%	1/4W
R165	1-215-445-00	METAL	10K	1%	1/4W
R166	1-215-469-00	METAL	100K	1%	1/4W
R167	1-215-469-00	METAL	100K	1%	1/4W
R250	1-215-421-00	METAL	1K	1%	1/4W
R251	1-215-429-00	METAL	2.2K	1%	1/4W
R252	1-215-445-00	METAL	10K	1%	1/4W
R253	1-215-445-00	METAL	10K	1%	1/4W
R254	1-215-473-00	METAL	150K	1%	1/4W
R256	1-215-453-00	METAL	22K	1%	1/4W
R257	1-215-445-00	METAL	10K	1%	1/4W
R258	1-215-446-00	METAL	11K	1%	1/4W
R260	1-215-457-00	METAL	33K	1%	1/4W
R261	1-215-445-00	METAL	10K	1%	1/4W
R262	1-215-401-11	METAL	150	1%	1/4W
R263	1-215-401-11	METAL	150	1%	1/4W
R264	1-215-445-00	METAL	10K	1%	1/4W
R265	1-215-445-00	METAL	10K	1%	1/4W

Ref. No.	Part No.	Description			Remark
R266	1-215-469-00	METAL	100K	1%	1/4W
R267	1-215-469-00	METAL	100K	1%	1/4W
		< VARIABLE RESISTOR >			
RV102	1-223-877-11	RES, VAR, CARBON 10K (LEVEL CH-1(L), ANALOG(LINE) OUT)			
RV202	1-223-877-11	RES, VAR, CARBON 10K (LEVEL CH-2(R), ANALOG(LINE) OUT)			
**********					
*	A-2007-521-A	MAIN BOARD, COMPLETE (INCLUDING AUDIO AND DIGITAL BOARDS) AUDIO BOARD (SUPPLIED WITH MAIN BOARD, COMPLETE)			
		**********			
	2-259-121-01	SCREW, TR			
*	3-309-144-21	HEAT SINK			
*	4-363-146-71	HEAT SINK, V.OUT			
	7-685-871-01	SCREW +BVTT 3X6 (S)			
		< CAPACITOR >			
C102	1-126-023-11	ELECT	100uF	20%	25V
C104	1-130-481-00	MYLAR	0.0068uF	5%	50V
C105	1-126-023-11	ELECT	100uF	20%	25V
C106-109					
	1-136-165-00	FILM	0.1uF	5%	50V
C110	1-129-702-00	FILM	0.001uF	5%	630V
C111	1-136-478-11	FILM	470PF	5%	630V
C112	1-136-478-11	FILM	470PF	5%	630V
C113	1-136-437-11	FILM	220PF	5%	630V
C114	1-136-437-11	FILM	220PF	5%	630V
C115	1-136-559-11	FILM	0.0047uF	5%	630V
C116	1-129-702-00	FILM	0.001uF	5%	630V
C117	1-126-023-11	ELECT	100uF	20%	25V
C118	1-136-165-00	FILM	0.1uF	5%	50V
C119	1-136-165-00	FILM	0.1uF	5%	50V
C123	1-126-023-11	ELECT	100uF	20%	25V
C140	1-126-024-11	ELECT	220uF	20%	25V
C202	1-126-023-11	ELECT	100uF	20%	25V
C204	1-130-481-00	MYLAR	0.0068uF	5%	50V
C205	1-126-023-11	ELECT	100uF	20%	25V
C206-209					
	1-136-165-00	FILM	0.1uF	5%	50V
C210	1-129-702-00	FILM	0.001uF	5%	630V
C211	1-136-478-11	FILM	470PF	5%	630V
C212	1-136-478-11	FILM	470PF	5%	630V
C213	1-136-437-11	FILM	220PF	5%	630V
C214	1-136-437-11	FILM	220PF	5%	630V
C215	1-136-559-11	FILM	0.0047uF	5%	630V
C216	1-129-702-00	FILM	0.001uF	5%	630V

AUDIO (MAIN)

Ref. No.	Part No.	Description			Remark
C217	1-126-023-11	ELECT	100uF	20%	25V
C218	1-136-165-00	FILM	0.1uF	5%	50V
C219	1-136-165-00	FILM	0.1uF	5%	50V
C223	1-126-023-11	ELECT	100uF	20%	25V
C240	1-126-024-11	ELECT	220uF	20%	25V
C301	1-124-997-11	ELECT	470uF	20%	10V
C302	1-124-997-11	ELECT	470uF	20%	10V
C303-305					
	1-136-165-00	FILM	0.1uF	5%	50V
C306	1-126-023-11	ELECT	100uF	20%	25V
C307	1-136-165-00	FILM	0.1uF	5%	50V
C308	1-126-023-11	ELECT	100uF	20%	25V
C309	1-162-294-31	CERAMIC	0.001uF	10%	50V
C310	1-162-294-31	CERAMIC	0.001uF	10%	50V
C311	1-164-159-11	CERAMIC	0.1uF		50V
C312	1-124-997-11	ELECT	470uF	20%	10V
C313	1-136-165-00	FILM	0.1uF	5%	50V
C314	1-164-159-11	CERAMIC	0.1uF		50V
C315	1-162-195-31	CERAMIC	4.7PF	10%	50V
C316	1-162-195-31	CERAMIC	4.7PF	10%	50V
C317	1-162-196-31	CERAMIC	5.6PF	10%	50V
C318	1-162-196-31	CERAMIC	5.6PF	10%	50V
C319	1-164-159-11	CERAMIC	0.1uF		50V
C320	1-124-564-11	ELECT	4700uF	20%	25V
C321	1-124-564-11	ELECT	4700uF	20%	25V
C322	1-136-165-00	FILM	0.1uF	5%	50V
C323	1-136-165-00	FILM	0.1uF	5%	50V
C324	1-126-027-11	ELECT	1000uF	20%	25V
C325	1-126-027-11	ELECT	1000uF	20%	25V
C326	1-124-997-11	ELECT	470uF	20%	10V
C327	1-136-165-00	FILM	0.1uF	5%	50V
C328	1-126-023-11	ELECT	100uF	20%	25V
C329	1-136-165-00	FILM	0.1uF	5%	50V
C330	1-126-023-11	ELECT	100uF	20%	25V
C331	1-136-165-00	FILM	0.1uF	5%	50V
C332	1-136-165-00	FILM	0.1uF	5%	50V
C333	1-126-013-11	ELECT	1000uF	20%	16V
C334	1-162-294-31	CERAMIC	0.001uF	10%	50V
C335	1-162-294-31	CERAMIC	0.001uF	10%	50V
C336	1-164-159-11	CERAMIC	0.1uF		50V
C337	1-164-159-11	CERAMIC	0.1uF		50V
C338	1-126-023-11	ELECT	100uF	20%	25V
C339	1-164-159-11	CERAMIC	0.1uF		50V
C340	1-136-169-00	FILM	0.22uF	5%	50V
C341	1-136-153-00	FILM	0.01uF	5%	50V
C342	1-162-219-31	CERAMIC	68PF	5%	50V
C343	1-162-199-31	CERAMIC	10PF	5%	50V
C344	1-162-199-31	CERAMIC	10PF	5%	50V
C345	1-126-059-11	ELECT	10uF	20%	50V

Ref. No.	Part No.	Description			Remark
C346	1-164-159-11	CERAMIC	0.1uF		50V
C347	1-162-215-31	CERAMIC	47PF	5%	50V
C348	1-136-161-00	FILM	0.047uF	5%	50V
C350	1-126-026-11	ELECT	470uF	20%	25V
C351	1-126-026-11	ELECT	470uF	20%	25V
C352	1-164-159-11	CERAMIC	0.1uF		50V
C353	1-164-159-11	CERAMIC	0.1uF		50V
C356-358					
	1-164-159-11	CERAMIC	0.1uF		50V
C359	1-126-011-11	ELECT	330uF	20%	16V
C360	1-126-011-11	ELECT	330uF	20%	16V
C364	1-164-159-11	CERAMIC	0.1uF		50V
C367	1-164-159-11	CERAMIC	0.1uF		50V
C368	1-136-165-00	FILM	0.1uF	5%	50V
C369-372					
	1-164-159-11	CERAMIC	0.1uF		50V

< CONNECTOR >

CN302	1-691-766-31	PLUG (MICRO CONNECTOR)	4P
CN303	1-691-766-11	PLUG (MICRO CONNECTOR)	4P
CN304	1-691-768-11	PLUG (MICRO CONNECTOR)	6P
CN305	1-691-765-11	PLUG (MICRO CONNECTOR)	3P
CN307	1-691-765-31	PLUG (MICRO CONNECTOR)	3P
CN308	1-691-765-41	PLUG (MICRO CONNECTOR)	3P

< DIODE >

D101	8-719-987-63	DIODE	1N4148M
D102	8-719-987-63	DIODE	1N4148M
D103	8-719-987-63	DIODE	1N4148M
D104	8-719-987-63	DIODE	1N4148M
D201	8-719-987-63	DIODE	1N4148M
D202	8-719-987-63	DIODE	1N4148M
D203	8-719-987-63	DIODE	1N4148M
D204	8-719-987-63	DIODE	1N4148M
D301	8-719-230-02	DIODE	30DF2
D302	8-719-230-02	DIODE	30DF2
D303	8-719-230-02	DIODE	30DF2
D304	8-719-230-02	DIODE	30DF2
D305	8-719-987-63	DIODE	1N4148M
D306	8-719-987-63	DIODE	1N4148M
D307	8-719-987-63	DIODE	1N4148M
D308	8-719-976-30	DIODE	KV1560N
D309	8-719-987-63	DIODE	1N4148M
D310	8-719-987-63	DIODE	1N4148M
D311	8-719-987-63	DIODE	1N4148M
D312	8-719-987-63	DIODE	1N4148M
D313	8-719-987-63	DIODE	1N4148M
D314	8-719-987-63	DIODE	1N4148M

Ref. No.	Part No.	Description				Remark
		< RESISTOR >				
⚠FR304	1-219-139-11	FUSIBLE	0.68	10%	1/4W	F
⚠FR305	1-219-139-11	FUSIBLE	0.68	10%	1/4W	F
		< IC >				
IC101	8-759-900-72	IC	NE5532P			
IC102	8-759-900-72	IC	NE5532P			
IC201	8-759-900-72	IC	NE5532P			
IC202	8-759-900-72	IC	NE5532P			
IC301	8-759-231-58	IC	TA7812S			
IC302	8-759-245-86	IC	TA79012S			
IC303	8-759-602-83	IC	M5238P			
IC304	8-759-602-83	IC	M5238P			
IC305	8-759-094-53	IC	TA7805S(LBSONY)			
IC306	8-759-094-68	IC	TA79005S-LBSONY			
IC307	8-759-330-53	IC	CXD8493M-E1			
IC308	8-759-196-21	IC	CXD8482Q			
IC309	8-759-925-90	IC	SN74HC74ANS			
IC310	8-759-269-92	IC	SN74HCU04ANS-E20			
IC311	8-759-269-92	IC	SN74HCU04ANS-E20			
IC312	8-759-926-95	IC	SN74HC4020ANS			
IC313	8-759-270-50	IC	SN74HC368ANS-E20			
IC314	8-759-334-75	IC	CXD8505AQ			
IC315	8-759-250-81	IC	TC5081AP			
IC316	8-759-094-53	IC	TA7805S(LBSONY)			
IC317	8-759-094-53	IC	TA7805S(LBSONY)			
IC318	8-759-094-53	IC	TA7805S(LBSONY)			
IC319	8-759-143-11	IC	uPC24M12HF			
IC320	8-759-333-80	IC	LM2990T-12			
IC325	8-759-242-72	IC	TC7W00F			
		< COIL >				
L301-306	1-410-509-11	INDUCTOR	10uH			
L307	1-426-850-11	COIL (RF)	0.4uH			
L308	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH			
L309	1-410-397-21	FERRITE BEAD INDUCTOR	1.1uH			
L310-312	1-410-509-11	INDUCTOR	10uH			
		< TERMINAL BOARD >				
LUG301	1-537-770-21	TERMINAL BOARD, GROUND				
LUG302	1-537-770-21	TERMINAL BOARD, GROUND				
LUG304	1-537-770-21	TERMINAL BOARD, GROUND				
		< TRANSISTOR >				
Q102	8-729-107-85	TRANSISTOR	2SC3623A-K			
Q202	8-729-107-85	TRANSISTOR	2SC3623A-K			
Q303	8-729-900-80	TRANSISTOR	DTC114ES			
Q304	8-729-620-05	TRANSISTOR	2SC2603-EF			
Q305	8-729-620-05	TRANSISTOR	2SC2603-EF			
Q306	8-729-620-05	TRANSISTOR	2SC2603-EF			
Q307	8-729-200-56	TRANSISTOR	2SK241-GR			
Q308	8-729-200-56	TRANSISTOR	2SK241-GR			
Q309	8-729-900-61	TRANSISTOR	DTA114ES			
Q310	8-729-900-80	TRANSISTOR	DTC114ES			
Q311	8-729-900-80	TRANSISTOR	DTC114ES			
Q312	8-729-900-80	TRANSISTOR	DTC114ES			
		< RESISTOR >				
R102	1-249-441-11	CARBON	100K	5%	1/4W	
R106-109	1-249-425-11	CARBON	4.7K	5%	1/4W	
R110	1-249-401-11	CARBON	47	5%	1/4W	
R111	1-249-401-11	CARBON	47	5%	1/4W	
R112-115	1-249-425-11	CARBON	4.7K	5%	1/4W	
R116	1-249-419-11	CARBON	1.5K	5%	1/4W	
R117	1-249-419-11	CARBON	1.5K	5%	1/4W	
R118	1-249-425-11	CARBON	4.7K	5%	1/4W	
R119	1-249-425-11	CARBON	4.7K	5%	1/4W	
R120-123	1-249-421-11	CARBON	2.2K	5%	1/4W	
R124	1-249-419-11	CARBON	1.5K	5%	1/4W	
R125	1-249-419-11	CARBON	1.5K	5%	1/4W	
R126	1-249-441-11	CARBON	100K	5%	1/4W	
R127	1-249-407-11	CARBON	150	5%	1/4W	
R128	1-249-407-11	CARBON	150	5%	1/4W	
R129	1-249-429-11	CARBON	10K	5%	1/4W	
R202	1-249-441-11	CARBON	100K	5%	1/4W	
R206-209	1-249-425-11	CARBON	4.7K	5%	1/4W	
R210	1-249-401-11	CARBON	47	5%	1/4W	
R211	1-249-401-11	CARBON	47	5%	1/4W	
R212-215	1-249-425-11	CARBON	4.7K	5%	1/4W	
R216	1-249-419-11	CARBON	1.5K	5%	1/4W	
R217	1-249-419-11	CARBON	1.5K	5%	1/4W	
R218	1-249-425-11	CARBON	4.7K	5%	1/4W	
R219	1-249-425-11	CARBON	4.7K	5%	1/4W	
R220-223	1-249-421-11	CARBON	2.2K	5%	1/4W	
R224	1-249-419-11	CARBON	1.5K	5%	1/4W	
R225	1-249-419-11	CARBON	1.5K	5%	1/4W	
R226	1-249-441-11	CARBON	100K	5%	1/4W	
R227	1-249-407-11	CARBON	150	5%	1/4W	
R228	1-249-407-11	CARBON	150	5%	1/4W	
R229	1-249-429-11	CARBON	10K	5%	1/4W	
R303	1-249-429-11	CARBON	10K	5%	1/4W	

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

AUDIO (MAIN) | COVER (A) | COVER (B) | DIG-IN

Ref. No.	Part No.	Description			Remark
R304	1-249-413-11	CARBON	470	5%	1/4W
R305	1-249-413-11	CARBON	470	5%	1/4W
R306-308					
	1-249-417-11	CARBON	1K	5%	1/4W
R309	1-249-413-11	CARBON	470	5%	1/4W
R310	1-249-441-11	CARBON	100K	5%	1/4W
R311	1-249-417-11	CARBON	1K	5%	1/4W
R312	1-247-903-00	CARBON	1M	5%	1/4W
R313	1-249-407-11	CARBON	150	5%	1/4W
R314	1-249-441-11	CARBON	100K	5%	1/4W
R315	1-249-417-11	CARBON	1K	5%	1/4W
R316	1-247-903-00	CARBON	1M	5%	1/4W
R317	1-249-407-11	CARBON	150	5%	1/4W
R320	1-249-411-11	CARBON	330	5%	1/4W
R321	1-249-417-11	CARBON	1K	5%	1/4W
R322	1-249-441-11	CARBON	100K	5%	1/4W
R323	1-249-409-11	CARBON	220	5%	1/4W
R324	1-249-409-11	CARBON	220	5%	1/4W
R325-327					
	1-249-413-11	CARBON	470	5%	1/4W
R328	1-249-425-11	CARBON	4.7K	5%	1/4W
R329	1-249-417-11	CARBON	1K	5%	1/4W
R330	1-249-401-11	CARBON	47	5%	1/4W
R331	1-249-417-11	CARBON	1K	5%	1/4W
R332	1-249-429-11	CARBON	10K	5%	1/4W
R333	1-249-421-11	CARBON	2.2K	5%	1/4W
R334	1-249-429-11	CARBON	10K	5%	1/4W
R335	1-249-429-11	CARBON	10K	5%	1/4W
R336	1-249-428-11	CARBON	8.2K	5%	1/4W
R337	1-249-441-11	CARBON	100K	5%	1/4W
R338-340					
	1-249-417-11	CARBON	1K	5%	1/4W
R341	1-247-895-00	CARBON	470K	5%	1/4W
R342	1-249-437-11	CARBON	47K	5%	1/4W
R343	1-249-441-11	CARBON	100K	5%	1/4W
R345	1-249-429-11	CARBON	10K	5%	1/4W
R346	1-249-429-11	CARBON	10K	5%	1/4W
R347	1-249-421-11	CARBON	2.2K	5%	1/4W
R348	1-249-409-11	CARBON	220	5%	1/4W
R349	1-249-409-11	CARBON	220	5%	1/4W
R350	1-249-411-11	CARBON	330	5%	1/4W
R351	1-249-413-11	CARBON	470	5%	1/4W
R353	1-249-417-11	CARBON	1K	5%	1/4W
R354	1-249-417-11	CARBON	1K	5%	1/4W
		< RELAY >			
RY301	1-515-726-11	RELAY			

Ref. No.	Part No.	Description			Remark
		< VIBRATOR >			
X301	1-567-814-11	VIBRATOR, CRYSTAL (24.576MHz)			
X302	1-567-815-11	VIBRATOR, CRYSTAL (22.5792MHz)			
**********					
*	1-655-931-11	COVER (A) BOARD			
		**********			
**********					
*	1-656-407-11	COVER (B) BOARD			
		**********			
**********					
*	1-655-909-11	DIG-IN BOARD			
		**********			
		< CAPACITOR >			
C801	1-162-215-31	CERAMIC	47PF	5%	50V
C802	1-162-215-31	CERAMIC	47PF	5%	50V
C803	1-136-169-00	FILM	0.22uF	5%	50V
C804	1-136-169-00	FILM	0.22uF	5%	50V
C805	1-164-159-11	CERAMIC	0.1uF		50V
C806	1-136-169-00	FILM	0.22uF	5%	50V
		< IC >			
IC801	8-759-077-32	IC SN75ALS181N			
		< CONNECTOR >			
J801	1-750-788-11	CONNECTOR (XLR TYPE) 3P (DIGITAL IN/OUT IN)			
		< RESISTOR >			
R801	1-249-409-11	CARBON	220	5%	1/4W
R802	1-249-409-11	CARBON	220	5%	1/4W
R803	1-247-807-31	CARBON	100	5%	1/4W
R804	1-247-807-31	CARBON	100	5%	1/4W
R805	1-249-427-11	CARBON	6.8K	5%	1/4W
R806	1-249-393-11	CARBON	10	5%	1/4W
R807	1-249-393-11	CARBON	10	5%	1/4W
		< TRANSFORMER >			
T801	1-437-194-21	TRANSFORMER, PULSE			
T802	1-437-194-21	TRANSFORMER, PULSE			
**********					

Ref. No.	Part No.	Description			Remark
*	1-655-910-11	DIG-OUT BOARD			
		**********			
		< CAPACITOR >			
C807	1-136-169-00	FILM	0.22uF	5%	50V
C808-810					
	1-162-215-31	CERAMIC	47PF	5%	50V
		< CONNECTOR >			
J802	1-750-787-11	CONNECTOR (XLR TYPE) 3P			
					(DIGITAL IN/OUT OUT)
**********					
*	A-2007-521-A	MAIN BOARD, COMPLETE			
		(INCLUDING AUDIO AND DIGITAL BOARDS)			
		DIGITAL BOARD (SUPPLIED WITH MAIN BOARD,			
					COMPLETE)
		**********			
	1-533-293-11	FUSE HOLDER			
	1-550-414-21	HOLDER, BATTERY			
		< CAPACITOR >			
C501	1-126-017-11	ELECT	6800uF	20%	16V
C502	1-126-946-11	ELECT	6800uF	20%	25V
C503	1-126-927-11	ELECT	2200uF	20%	10V
C504	1-124-473-11	ELECT	1000uF	20%	10V
C505	1-124-472-11	ELECT	470uF	20%	10V
C506	1-124-472-11	ELECT	470uF	20%	10V
C507	1-164-159-11	CERAMIC	0.1uF		50V
C508	1-124-919-11	ELECT	220uF	20%	63V
C509	1-124-122-11	ELECT	100uF	20%	50V
C510	1-164-159-11	CERAMIC	0.1uF		50V
C511	1-164-159-11	CERAMIC	0.1uF		50V
C512	1-162-294-31	CERAMIC	0.001uF	10%	50V
C513	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C514	1-162-286-31	CERAMIC	220PF	10%	50V
C515	1-162-294-31	CERAMIC	0.001uF	10%	50V
C516	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C517	1-162-286-31	CERAMIC	220PF	10%	50V
C518	1-162-306-11	CERAMIC	0.01uF	20%	16V
C519	1-162-306-11	CERAMIC	0.01uF	20%	16V
C520	1-162-290-31	CERAMIC	470PF	10%	50V
C521	1-162-306-11	CERAMIC	0.01uF	20%	16V
C522	1-126-965-11	ELECT	22uF	20%	50V
C523	1-162-306-11	CERAMIC	0.01uF	20%	16V
C524	1-162-290-31	CERAMIC	470PF	10%	50V
C525	1-162-306-11	CERAMIC	0.01uF	20%	16V
C526	1-126-965-11	ELECT	22uF	20%	50V
C527	1-164-159-11	CERAMIC	0.1uF		50V

Ref. No.	Part No.	Description			Remark
C528	1-164-159-11	CERAMIC	0.1uF		50V
C529	1-124-442-00	ELECT	330uF	20%	6.3V
C530	1-162-294-31	CERAMIC	0.001uF	10%	50V
C531	1-126-961-11	ELECT	2.2uF	20%	50V
C532	1-164-159-11	CERAMIC	0.1uF		50V
C533	1-162-203-31	CERAMIC	15PF	5%	50V
C534	1-162-203-31	CERAMIC	15PF	5%	50V
C535	1-164-159-11	CERAMIC	0.1uF		50V
C536	1-136-165-00	FILM	0.1uF	5%	50V
C537	1-124-442-00	ELECT	330uF	20%	6.3V
C538	1-164-159-11	CERAMIC	0.1uF		50V
C539	1-162-306-11	CERAMIC	0.01uF	20%	16V
C540	1-162-294-31	CERAMIC	0.001uF	10%	50V
C541	1-162-284-31	CERAMIC	150PF	10%	50V
C542	1-164-159-11	CERAMIC	0.1uF		50V
C543	1-124-442-00	ELECT	330uF	20%	6.3V
C544-549					
	1-162-294-31	CERAMIC	0.001uF	10%	50V
C550	1-164-159-11	CERAMIC	0.1uF		50V
C552	1-162-207-31	CERAMIC	22PF	5%	50V
C553	1-162-207-31	CERAMIC	22PF	5%	50V
C554	1-162-203-31	CERAMIC	15PF	5%	50V
C555	1-162-203-31	CERAMIC	15PF	5%	50V
C556-558					
	1-164-159-11	CERAMIC	0.1uF		50V
C559	1-136-153-00	FILM	0.01uF	5%	50V
C560	1-164-159-11	CERAMIC	0.1uF		50V
C561	1-162-211-31	CERAMIC	33PF	5%	50V
C562	1-136-153-00	FILM	0.01uF	5%	50V
C563	1-124-907-11	ELECT	10uF	20%	50V
C564	1-136-153-00	FILM	0.01uF	5%	50V
C565	1-162-282-31	CERAMIC	100PF	10%	50V
C566	1-164-159-11	CERAMIC	0.1uF		50V
C568	1-164-159-11	CERAMIC	0.1uF		50V
C573	1-162-179-11	CERAMIC	0.1uF		50V
C575	1-164-159-11	CERAMIC	0.1uF		50V
C576	1-164-159-11	CERAMIC	0.1uF		50V
C578	1-164-159-11	CERAMIC	0.1uF		50V
C579	1-164-159-11	CERAMIC	0.1uF		50V
C580	1-162-203-31	CERAMIC	15PF	5%	50V
C581	1-162-203-31	CERAMIC	15PF	5%	50V
C582	1-164-159-11	CERAMIC	0.1uF		50V
C583	1-162-600-11	CERAMIC	0.0047uF	20%	16V
C584	1-162-600-11	CERAMIC	0.0047uF	20%	16V
C585	1-162-294-31	CERAMIC	0.001uF	10%	50V
		< CONNECTOR >			
CN501	1-691-767-11	PLUG (MICRO CONNECTOR) 5P			
CN502	1-691-766-11	PLUG (MICRO CONNECTOR) 4P			

DIGITAL (MAIN)

Ref. No.	Part No.	Description	Remark
* CN504	1-568-845-11	SOCKET, CONNECTOR 31P	
* CN505	1-568-836-11	SOCKET, CONNECTOR 17P	
CN506	1-770-164-11	PIN, CONNECTOR (PC BOARD) 15P	
CN507	1-691-461-11	PIN, CONNECTOR (PC BOARD) 5P	
* CN508	1-564-339-00	PIN, CONNECTOR 5P	
CN509	1-691-765-31	PLUG (MICRO CONNECTOR) 3P	
CN510	1-691-765-41	PLUG (MICRO CONNECTOR) 3P	
CN511	1-691-765-21	PLUG (MICRO CONNECTOR) 3P	
CN512	1-691-768-31	PLUG (MICRO CONNECTOR) 6P	
* CN517	1-691-007-11	CONNECTOR, PC BOARD (PLUG) 4P	
CN518	1-764-187-11	PIN, CONNECTOR 8P	
CN519	1-764-187-11	PIN, CONNECTOR 8P	
		< DIODE >	
D501	8-719-312-47	DIODE RBA-406B	
D502	8-719-312-47	DIODE RBA-406B	
D503	8-719-200-77	DIODE 10E2N	
D504	8-719-015-13	DIODE UZP-9.1BC-TP	
D505	8-719-200-77	DIODE 10E2N	
D506	8-719-200-77	DIODE 10E2N	
D507	8-719-985-62	DIODE HZS5ALL	
D508	8-719-987-63	DIODE 1N4148M	
D509	8-719-987-63	DIODE 1N4148M	
D510	8-719-200-77	DIODE 10E2N	
D511	8-719-911-06	DIODE 1SS106	
D512	8-719-911-06	DIODE 1SS106	
D513	8-719-045-72	DIODE KV1550NT	
		< FUSE >	
⚠F501	1-532-286-00	FUSE (T2.5A/250V) (AEP, UK, G)	
⚠F501	1-576-105-11	FUSE (2.5A/250V) (US, Canadian)	
⚠F502	1-532-286-00	FUSE (T2.5A/250V) (AEP, UK, G)	
⚠F502	1-576-105-11	FUSE (2.5A/250V) (US, Canadian)	
		< RESISTOR >	
⚠FR501	1-219-136-11	FUSIBLE 0.22 10% 1/4W F	
⚠FR502	1-212-873-11	FUSIBLE 47 5% 1/4W F	
		< IC >	
IC501	8-752-870-08	IC CXP87532-022Q	
IC502	8-752-870-87	IC CXP87532-023Q	
IC503	8-752-355-55	IC CXD2605Q	
IC504	8-752-337-79	IC CXK58257AM-10LL	
IC508	8-759-927-46	IC SN74HC00ANS	
IC509	8-759-701-01	IC NJM2904M	
IC510	8-759-927-46	IC SN74HC00ANS	
IC511	8-759-926-17	IC SN74HC153ANS	
IC512	8-759-007-80	IC MC74HC175F	
IC513	8-759-269-92	IC SN74HCU04ANS-E20	
IC514	8-759-927-46	IC SN74HC00ANS	
IC515	8-759-927-46	IC SN74HC00ANS	
IC516	8-759-634-43	IC M51953BFP	
IC517	8-759-333-79	IC AT24C01A-10SC-TP	
IC518	8-759-333-82	IC MSM6782-01MS-K-R1	
IC519	8-759-925-90	IC SN74HC74ANS	
IC520	8-759-701-01	IC NJM2904M	
IC521	8-759-701-01	IC NJM2904M	
IC522	8-759-701-01	IC NJM2904M	
IC523	8-759-633-65	IC M54641L	
		< JACK >	
J501	1-770-162-11	JACK, PIN 2P (DIGITAL IN/OUT COAXIAL IN/OUT)	
		< COIL >	
L501-503	1-410-509-11	INDUCTOR 10uH	
L504	1-410-498-11	INDUCTOR 1.2uH	
L506	1-410-509-11	INDUCTOR 10uH	
		< TERMINAL BOARD >	
LUG503	1-537-770-21	TERMINAL BOARD, GROUND	
		< TRANSISTOR >	
Q501	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q502	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q503	8-729-140-97	TRANSISTOR 2SB734-34	
Q504	8-729-927-11	TRANSISTOR 2SA1585SQR	
Q505	8-729-927-12	TRANSISTOR 2SC4115SQR	
Q506	8-729-927-11	TRANSISTOR 2SA1585SQR	
Q507	8-729-927-12	TRANSISTOR 2SC4115SQR	
Q508	8-729-900-80	TRANSISTOR DTC114ES	
Q509	8-729-900-80	TRANSISTOR DTC114ES	
Q510	8-729-900-80	TRANSISTOR DTC114ES	
Q511	8-729-900-80	TRANSISTOR DTC114ES	
Q512	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q513	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q514	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q515	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q516	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q517	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q518	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q519	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q520	8-729-900-80	TRANSISTOR DTC114ES	
Q521	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q522	8-729-900-80	TRANSISTOR DTC114ES	
Q523	8-729-900-80	TRANSISTOR DTC114ES	
Q524	8-729-900-80	TRANSISTOR DTC114ES	

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R501	1-249-425-11	CARBON	4.7K	5%	1/4W
R502	1-249-429-11	CARBON	10K	5%	1/4W
R503	1-249-421-11	CARBON	2.2K	5%	1/4W
R504	1-249-433-11	CARBON	22K	5%	1/4W
R505	1-249-423-11	CARBON	3.3K	5%	1/4W
R506	1-249-413-11	CARBON	470	5%	1/4W
R507	1-249-429-11	CARBON	10K	5%	1/4W
R508-511					
	1-249-409-11	CARBON	220	5%	1/4W
R512-520					
	1-249-441-11	CARBON	100K	5%	1/4W
R522	1-249-441-11	CARBON	100K	5%	1/4W
R523	1-249-441-11	CARBON	100K	5%	1/4W
R524	1-249-429-11	CARBON	10K	5%	1/4W
R525	1-249-417-11	CARBON	1K	5%	1/4W
R526	1-249-429-11	CARBON	10K	5%	1/4W
R527	1-247-807-31	CARBON	100	5%	1/4W
R528	1-249-417-11	CARBON	1K	5%	1/4W
R529	1-249-409-11	CARBON	220	5%	1/4W
R530	1-249-441-11	CARBON	100K	5%	1/4W
R531	1-249-441-11	CARBON	100K	5%	1/4W
R532	1-249-429-11	CARBON	10K	5%	1/4W
R533	1-249-417-11	CARBON	1K	5%	1/4W
R534	1-249-429-11	CARBON	10K	5%	1/4W
R535	1-247-807-31	CARBON	100	5%	1/4W
R536	1-249-417-11	CARBON	1K	5%	1/4W
R537	1-249-409-11	CARBON	220	5%	1/4W
R539	1-249-409-11	CARBON	220	5%	1/4W
R540	1-249-409-11	CARBON	220	5%	1/4W
R541-544					
	1-249-441-11	CARBON	100K	5%	1/4W
R545-547					
	1-249-429-11	CARBON	10K	5%	1/4W
R548	1-249-441-11	CARBON	100K	5%	1/4W
R549	1-249-441-11	CARBON	100K	5%	1/4W
R552	1-249-429-11	CARBON	10K	5%	1/4W
R553	1-249-425-11	CARBON	4.7K	5%	1/4W
R554	1-249-425-11	CARBON	4.7K	5%	1/4W
R555	1-249-429-11	CARBON	10K	5%	1/4W
R556	1-249-429-11	CARBON	10K	5%	1/4W
R557-562					
	1-249-441-11	CARBON	100K	5%	1/4W
R563-565					
	1-249-429-11	CARBON	10K	5%	1/4W
R566	1-249-417-11	CARBON	1K	5%	1/4W
R567-570					
	1-249-429-11	CARBON	10K	5%	1/4W
R571	1-247-807-31	CARBON	100	5%	1/4W

Ref. No.	Part No.	Description			Remark
R572	1-249-413-11	CARBON	470	5%	1/4W
R573	1-247-807-31	CARBON	100	5%	1/4W
R574	1-249-441-11	CARBON	100K	5%	1/4W
R575-578					
	1-249-429-11	CARBON	10K	5%	1/4W
R581	1-249-441-11	CARBON	100K	5%	1/4W
R583	1-249-425-11	CARBON	4.7K	5%	1/4W
R584-591					
	1-249-441-11	CARBON	100K	5%	1/4W
R593	1-249-417-11	CARBON	1K	5%	1/4W
R594	1-249-421-11	CARBON	2.2K	5%	1/4W
R595	1-249-417-11	CARBON	1K	5%	1/4W
R596	1-249-429-11	CARBON	10K	5%	1/4W
R597	1-249-441-11	CARBON	100K	5%	1/4W
R598	1-249-441-11	CARBON	100K	5%	1/4W
R599	1-249-429-11	CARBON	10K	5%	1/4W
R600-602					
	1-249-425-11	CARBON	4.7K	5%	1/4W
R603	1-249-413-11	CARBON	470	5%	1/4W
R604	1-249-433-11	CARBON	22K	5%	1/4W
R605	1-249-433-11	CARBON	22K	5%	1/4W
R606	1-249-409-11	CARBON	220	5%	1/4W
R607	1-249-431-11	CARBON	15K	5%	1/4W
R608	1-249-417-11	CARBON	1K	5%	1/4W
R610	1-247-876-11	CARBON	75K	5%	1/4W
R611	1-249-411-11	CARBON	330	5%	1/4W
R612	1-249-437-11	CARBON	47K	5%	1/4W
R613	1-249-429-11	CARBON	10K	5%	1/4W
R614	1-249-429-11	CARBON	10K	5%	1/4W
R615	1-247-807-31	CARBON	100	5%	1/4W
R616	1-249-429-11	CARBON	10K	5%	1/4W
R617	1-249-435-11	CARBON	33K	5%	1/4W
R618	1-249-421-11	CARBON	2.2K	5%	1/4W
R619	1-249-421-11	CARBON	2.2K	5%	1/4W
R620	1-247-807-31	CARBON	100	5%	1/4W
R621	1-247-804-11	CARBON	75	5%	1/4W
R622	1-249-429-11	CARBON	10K	5%	1/4W
R623	1-249-429-11	CARBON	10K	5%	1/4W
R625-630					
	1-249-429-11	CARBON	10K	5%	1/4W
R634-636					
	1-249-423-11	CARBON	3.3K	5%	1/4W
R637	1-249-429-11	CARBON	10K	5%	1/4W
R638	1-249-429-11	CARBON	10K	5%	1/4W
R639	1-247-804-11	CARBON	75	5%	1/4W
R645	1-249-413-11	CARBON	470	5%	1/4W
R647	1-249-409-11	CARBON	220	5%	1/4W

DIGITAL (MAIN) DISPLAY

Ref. No.	Part No.	Description			Remark
		< VARIABLE RESISTOR >			
RV501	1-241-763-11	RES, ADJ, CARBON 4.7K			
RV502	1-241-763-11	RES, ADJ, CARBON 4.7K			
		< SWITCH >			
S501	1-572-622-11	SWITCH, SLIDE (AES/EBU-COAXIAL)			
		< COIL >			
T501	1-409-594-11	COIL (WITH CORE)			
		< VIBRATOR >			
X501	1-567-814-11	VIBRATOR, CRYSTAL (24.576MHz)			
X502	1-567-816-11	VIBRATOR, CRYSTAL (18.816MHz)			
X503	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)			
**********					
*	A-2007-367-A	DISPLAY BOARD, COMPLETE			
		**********			
	2-389-320-01	CUSHION			
*	4-922-523-01	HOLDER (RIGHT)			
*	4-922-524-01	HOLDER (LEFT)			
		< CAPACITOR >			
C701	1-126-177-11	ELECT	100uF	20%	10V
C702	1-136-165-00	FILM	0.1uF	5%	50V
C703	1-162-294-31	CERAMIC	0.001uF	10%	50V
C704	1-162-294-31	CERAMIC	0.001uF	10%	50V
C706	1-164-159-11	CERAMIC	0.1uF		50V
C707	1-164-159-11	CERAMIC	0.1uF		50V
C710	1-162-306-11	CERAMIC	0.01uF	20%	16V
C711	1-162-306-11	CERAMIC	0.01uF	20%	16V
		< CONNECTOR >			
CN701	1-568-860-11	SOCKET, CONNECTOR 17P			
		< COMPOSITION CIRCUIT BLOCK >			
CP701-704					
	1-233-276-11	COMPOSITION CIRCUIT BLOCK 100KX10			
		< FLUORESCENT INDICATOR >			
FL701	1-517-382-11	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC701	8-752-869-39	IC CXP82316-061Q			
IC702	8-759-995-09	IC MSM6338RS			
IC704	8-759-916-12	IC SN74HC00AN			

Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q701	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q702	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q703	8-729-620-05	TRANSISTOR 2SC2603-EF			
		< RESISTOR >			
R701-708					
	1-249-427-11	CARBON	6.8K	5%	1/4W
R709	1-249-415-11	CARBON	680	5%	1/4W
R710	1-249-417-11	CARBON	1K	5%	1/4W
R711	1-249-419-11	CARBON	1.5K	5%	1/4W
R712	1-249-423-11	CARBON	3.3K	5%	1/4W
R713	1-249-425-11	CARBON	4.7K	5%	1/4W
R714	1-249-429-11	CARBON	10K	5%	1/4W
R715	1-249-435-11	CARBON	33K	5%	1/4W
R716	1-249-415-11	CARBON	680	5%	1/4W
R717	1-249-417-11	CARBON	1K	5%	1/4W
R718	1-249-419-11	CARBON	1.5K	5%	1/4W
R719	1-249-423-11	CARBON	3.3K	5%	1/4W
R720	1-249-425-11	CARBON	4.7K	5%	1/4W
R721	1-249-429-11	CARBON	10K	5%	1/4W
R723	1-249-415-11	CARBON	680	5%	1/4W
R724	1-249-417-11	CARBON	1K	5%	1/4W
R725	1-249-419-11	CARBON	1.5K	5%	1/4W
R726	1-249-423-11	CARBON	3.3K	5%	1/4W
R727	1-249-425-11	CARBON	4.7K	5%	1/4W
R728	1-249-429-11	CARBON	10K	5%	1/4W
R730	1-249-415-11	CARBON	680	5%	1/4W
R731	1-249-417-11	CARBON	1K	5%	1/4W
R732	1-249-419-11	CARBON	1.5K	5%	1/4W
R733	1-249-423-11	CARBON	3.3K	5%	1/4W
R734	1-249-425-11	CARBON	4.7K	5%	1/4W
R735	1-249-429-11	CARBON	10K	5%	1/4W
R737	1-249-415-11	CARBON	680	5%	1/4W
R738	1-249-417-11	CARBON	1K	5%	1/4W
R739	1-249-419-11	CARBON	1.5K	5%	1/4W
R740	1-249-423-11	CARBON	3.3K	5%	1/4W
R741	1-249-425-11	CARBON	4.7K	5%	1/4W
R742	1-249-429-11	CARBON	10K	5%	1/4W
R743	1-249-435-11	CARBON	33K	5%	1/4W
R744	1-249-415-11	CARBON	680	5%	1/4W
R745	1-249-417-11	CARBON	1K	5%	1/4W
R746	1-249-419-11	CARBON	1.5K	5%	1/4W
R747	1-249-423-11	CARBON	3.3K	5%	1/4W
R748	1-249-425-11	CARBON	4.7K	5%	1/4W
R749	1-249-429-11	CARBON	10K	5%	1/4W
R750-752					
	1-249-435-11	CARBON	33K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R753	1-249-429-11	CARBON	10K	5%	1/4W
R754	1-249-435-11	CARBON	33K	5%	1/4W
R756	1-249-415-11	CARBON	680	5%	1/4W
R757	1-249-435-11	CARBON	33K	5%	1/4W
R758	1-249-415-11	CARBON	680	5%	1/4W
R759	1-249-417-11	CARBON	1K	5%	1/4W
R760	1-249-429-11	CARBON	10K	5%	1/4W
		< SWITCH >			
S701	1-554-937-11	SWITCH, KEY BOARD (OPEN/CLOSE ⏏)			
S702	1-554-937-11	SWITCH, KEY BOARD (STOP ■)			
S703	1-554-937-11	SWITCH, KEY BOARD (PLAY ▶)			
S704	1-554-937-11	SWITCH, KEY BOARD (⏮ PREVIOUS (AMS))			
S705	1-554-937-11	SWITCH, KEY BOARD (NEXT ⏭ (AMS))			
S706	1-554-937-11	SWITCH, KEY BOARD (MODE (COUNTER))			
S707	1-554-937-11	SWITCH, KEY BOARD (RESET (COUNTER))			
S709	1-554-937-11	SWITCH, KEY BOARD (◀◀ REW)			
S710	1-554-937-11	SWITCH, KEY BOARD (FF ▶▶)			
S711	1-554-937-11	SWITCH, KEY BOARD (REC ●)			
S712	1-554-937-11	SWITCH, KEY BOARD (PAUSE ❚❚)			
S713	1-554-937-11	SWITCH, KEY BOARD (REC MUTE ⊙)			
S716	1-554-937-11	SWITCH, KEY BOARD (AUTO (START ID))			
S717	1-554-937-11	SWITCH, KEY BOARD (RENUMBER (START ID))			
S718	1-554-937-11	SWITCH, KEY BOARD (REHEARSAL (START ID))			
S719	1-554-937-11	SWITCH, KEY BOARD (WRITE (START ID))			
S720	1-554-937-11	SWITCH, KEY BOARD (ERASE (START ID))			
S721	1-554-937-11	SWITCH, KEY BOARD (MARGIN RESET)			
S724	1-554-937-11	SWITCH, KEY BOARD (REHEARSAL (SKIP ID))			
S725	1-554-937-11	SWITCH, KEY BOARD (WRITE (SKIP ID))			
S726	1-554-937-11	SWITCH, KEY BOARD (ERASE (SKIP ID))			
S727	1-554-937-11	SWITCH, KEY BOARD (SKIP PLAY)			
S728	1-554-937-11	SWITCH, KEY BOARD (INPUT MONITOR)			
S730	1-554-937-11	SWITCH, KEY BOARD (1)			
S731	1-554-937-11	SWITCH, KEY BOARD (2)			
S732	1-554-937-11	SWITCH, KEY BOARD (3)			
S733	1-554-937-11	SWITCH, KEY BOARD (4)			
S734	1-554-937-11	SWITCH, KEY BOARD (5)			
S735	1-554-937-11	SWITCH, KEY BOARD (6)			
S736	1-554-937-11	SWITCH, KEY BOARD (7)			
S737	1-554-937-11	SWITCH, KEY BOARD (8)			
S738	1-554-937-11	SWITCH, KEY BOARD (RECORDED (DATE))			
S739	1-554-937-11	SWITCH, KEY BOARD (PRESENT (DATE))			
S740	1-554-937-11	SWITCH, KEY BOARD (CLOCK SET)			
S742	1-554-937-11	SWITCH, KEY BOARD (9)			
S743	1-554-937-11	SWITCH, KEY BOARD (0)			
S744	1-554-937-11	SWITCH, KEY BOARD (CLEAR)			

Ref. No.	Part No.	Description			Remark
		< VIBRATOR >			
X701	1-577-359-21	VIBRATOR, CERAMIC (4.19MHz)			
**********					
*	A-2007-321-A	DRUM DRIVE BOARD, COMPLETE			
		**********			
	1-537-770-21	TERMINAL BOARD, GROUND			
		< CAPACITOR >			
C1	1-124-257-00	ELECT	2.2uF	20%	50V
C3	1-162-306-11	CERAMIC	0.01uF	20%	16V
C5-7					
	1-126-923-11	ELECT	220uF	20%	10V
C8	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C9	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C10	1-162-286-31	CERAMIC	220PF	10%	50V
C11	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C12	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C13	1-126-096-11	ELECT	10uF	20%	35V
C14	1-126-923-11	ELECT	220uF	20%	10V
C15	1-162-306-11	CERAMIC	0.01uF	20%	16V
		< CONNECTOR >			
* CN1	1-568-845-11	SOCKET, CONNECTOR 31P			
CN2	1-691-461-11	PIN, CONNECTOR (PC BOARD) 5P			
CN3	1-764-325-11	PIN, CONNECTOR (PCB) (V TYPE) 2P			
* CN4	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
* CN5	1-564-515-11	PIN, CONNECTOR (PCB) (V TYPE) 12P			
* CN6	1-691-465-11	PIN, CONNECTOR (PC BOARD) 9P			
* CN7	1-568-369-11	HOUSING, CONNECTOR (PC BOARD) 8P			
* CN8	1-506-503-11	PIN, CONNECTOR 9P			
* CN9	1-564-337-00	PIN, CONNECTOR 3P			
* CN11	1-564-337-61	PIN, CONNECTOR 3P			
		< DIODE >			
D2	8-719-200-82	DIODE 11ES2			
D3	8-719-200-82	DIODE 11ES2			
		< IC >			
IC1	8-759-135-80	IC uPC358C			
IC2	8-759-633-65	IC M54641L			
IC3	8-752-060-73	IC CX20115A-T4			
		< TRANSISTOR >			
Q1	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q2	8-729-801-84	TRANSISTOR 2SB1013-4			
Q3	8-729-801-93	TRANSISTOR 2SD1387			

DRUM DRIVE | HP VOL | INPUT SW | LOAD-SW | LOADING-MOT | MOTOR

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R1	1-249-423-11	CARBON	3.3K	5%	1/4W
R2	1-249-429-11	CARBON	10K	5%	1/4W
R3	1-249-407-11	CARBON	150	5%	1/4W
R4	1-249-423-11	CARBON	3.3K	5%	1/4W
R5	1-249-421-11	CARBON	2.2K	5%	1/4W
R6	1-249-435-11	CARBON	33K	5%	1/4W
R7	1-247-807-31	CARBON	100	5%	1/4W
R8	1-249-417-11	CARBON	1K	5%	1/4W
R9	1-249-429-11	CARBON	10K	5%	1/4W
R11	1-249-429-11	CARBON	10K	5%	1/4W
R12	1-249-417-11	CARBON	1K	5%	1/4W
R14-17	1-249-441-11	CARBON	100K	5%	1/4W
R18	1-249-409-11	CARBON	220	5%	1/4W
R19	1-249-409-11	CARBON	220	5%	1/4W
R20	1-249-401-11	CARBON	47	5%	1/4W
R21	1-249-429-11	CARBON	10K	5%	1/4W
R22	1-249-433-11	CARBON	22K	5%	1/4W
R23	1-249-403-11	CARBON	68	5%	1/4W
R24	1-249-403-11	CARBON	68	5%	1/4W
R25	1-249-423-11	CARBON	3.3K	5%	1/4W
R26	1-249-423-11	CARBON	3.3K	5%	1/4W
R27	1-249-419-11	CARBON	1.5K	5%	1/4W
**********					
*	1-655-922-11	HP VOL BOARD			
		**********			
		< CAPACITOR >			
C122	1-102-114-00	CERAMIC	470PF	10%	50V
C222	1-102-114-00	CERAMIC	470PF	10%	50V
C374	1-126-024-11	ELECT	220uF	20%	25V
C375	1-126-024-11	ELECT	220uF	20%	25V
		< RESISTOR >			
⚠FR301	1-212-857-00	FUSIBLE	10	5%	1/4W F
⚠FR302	1-212-857-00	FUSIBLE	10	5%	1/4W F
		< IC >			
IC321	8-759-981-96	IC RC4560D			
		< JACK >			
J304	1-565-327-11	JACK, LARGE TYPE 1P (PHONES)			

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R132	1-249-435-11	CARBON	33K	5%	1/4W
R133	1-249-431-11	CARBON	15K	5%	1/4W
R134	1-249-425-11	CARBON	4.7K	5%	1/4W
R135	1-247-807-31	CARBON	100	5%	1/4W
R232	1-249-435-11	CARBON	33K	5%	1/4W
R233	1-249-431-11	CARBON	15K	5%	1/4W
R234	1-249-425-11	CARBON	4.7K	5%	1/4W
R235	1-247-807-31	CARBON	100	5%	1/4W
		< VARIABLE RESISTOR >			
RV302	1-241-537-11	RES, VAR, CARBON 20K/20K (PHONE LEVEL)			
**********					
*	1-655-919-11	INPUT SW BOARD			
		**********			
		< RESISTOR >			
R736	1-249-435-11	CARBON	33K	5%	1/4W
		< SWITCH >			
S729	1-762-321-11	SWITCH, ROTARY (INPUT)			
**********					
*	1-655-285-11	LOAD-SW BOARD			
		**********			
		< SWITCH >			
S902	1-571-489-11	SWITCH, SLIDE (UNLOAD)			
S903	1-571-489-11	SWITCH, SLIDE (LOAD)			
**********					
*	1-655-286-11	LOADING-MOT BOARD			
		**********			
		< CAPACITOR >			
C999	1-136-165-00	FILM	0.1uF	5%	50V
		< CONNECTOR >			
* CN919	1-564-496-11	PIN, CONNECTOR 3P			
* CN920	1-564-497-11	PIN, CONNECTOR 4P			
**********					
*	1-655-913-11	MOTOR BOARD			
		**********			
		< CAPACITOR >			
C1	1-161-772-11	CERAMIC	0.1uF	10%	25V

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
		< CONNECTOR >			
* CN1	1-564-498-11	PIN, CONNECTOR 5P			
* CN4	1-564-336-00	PIN, CONNECTOR 2P			
* CN5	1-564-336-61	PIN, CONNECTOR 2P			
**********					
*	1-655-925-11	PRIMARY BOARD			
		**********			
	1-775-047-11	CORD (WITH CONNECTOR)			
		< CAPACITOR >			
⚠C901	1-113-916-11	CERAMIC	0.01uF	20% 250V	(AEP, UK, G)
⚠C901	1-161-744-51	CERAMIC	0.01uF	400V	(US, Canadian)
⚠C902	1-113-916-11	CERAMIC	0.01uF	20% 250V	(AEP, UK, G)
⚠C902	1-161-744-51	CERAMIC	0.01uF	400V	(US, Canadian)
⚠C903	1-113-920-11	CERAMIC	0.0022uF	20% 250V	(AEP, UK, G)
⚠C903	1-161-742-00	CERAMIC	0.0022uF	20% 400V	(US, Canadian)
⚠C904	1-113-920-11	CERAMIC	0.0022uF	20% 250V	(AEP, UK, G)
⚠C904	1-161-742-00	CERAMIC	0.0022uF	20% 400V	(US, Canadian)
⚠C905	1-113-920-11	CERAMIC	0.0022uF	20% 250V	(AEP, UK, G)
⚠C905	1-161-742-00	CERAMIC	0.0022uF	20% 400V	(US, Canadian)
⚠C906	1-113-920-11	CERAMIC	0.0022uF	20% 250V	(AEP, UK, G)
		< CONNECTOR >			
* CN901	1-580-230-31	PIN, CONNECTOR (PC BOARD) 2P			
CN902	1-770-353-21	PIN, CONNECTOR (PC BOARD) 2P			
CN903	1-770-354-11	PIN, CONNECTOR (PC BOARD) 2P			
		< COIL >			
⚠L901	1-421-915-11	COIL, LINE FILTER			
		< GROUND PLATE >			
* LUG901	3-346-266-12	PLATE, GROUND			
**********					
*	1-655-920-11	REC MODE SW BOARD			
		**********			
		< CONNECTOR >			
CN702	1-691-758-51	PIN, CONNECTOR 3P			
		< RESISTOR >			
R729	1-249-435-11	CARBON	33K	5% 1/4W	
		< SWITCH >			
S722	1-572-758-11	SWITCH, ROTARY (REC MODE)			
**********					
*	1-655-921-11	REC VOL BOARD			
		**********			
		< CONNECTOR >			
CN306	1-764-341-31	PIN, CONNECTOR (PCB) (L TYPE) 4P			
		< RESISTOR >			
R101	1-247-807-31	CARBON	100	5% 1/4W	
R201	1-247-807-31	CARBON	100	5% 1/4W	
		< VARIABLE RESISTOR >			
RV301	1-241-937-11	RES, VAR, CARBON 20K/20K (REC LEVEL)			
**********					
*	1-654-393-11	REC-EN BOARD			
		**********			
		< SWITCH >			
S901	1-572-459-11	SWITCH, PUSH (CASSETTE IN/REC ENABLE)			
**********					
*	1-655-911-11	REMOTE BOARD			
		**********			
		< CAPACITOR >			
C811-816					
	1-162-306-11	CERAMIC	0.01uF	20% 16V	
C817	1-164-159-11	CERAMIC	0.1uF	50V	
C818	1-162-294-31	CERAMIC	0.001uF	10% 50V	
C819	1-162-294-31	CERAMIC	0.001uF	10% 50V	
		< CONNECTOR >			
CN801	1-691-768-41	PLUG (MICRO CONNECTOR) 6P			

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REMOTE RF AMP

Ref. No.	Part No.	Description			Remark
		< COMPOSITION CIRCUIT BLOCK >			
CP801	1-239-302-11	COMPOSITION CIRCUIT BLOCK 10KX6			
		< IC >			
IC802	8-759-916-20	IC SN74HC14AN			
		< CONNECTOR >			
J803	1-770-355-11	CONNECTOR (DIN) 8P (REMOTE)			
		< JACK >			
J804	1-507-756-00	JACK (SMALL TYPE) (REMOTE IN)			
		< TRANSISTOR >			
Q801	8-729-900-80	TRANSISTOR DTC114ES			
Q802	8-729-900-80	TRANSISTOR DTC114ES			
Q803	8-729-900-80	TRANSISTOR DTC114ES			
Q804	8-729-900-80	TRANSISTOR DTC114ES			
Q805	8-729-900-80	TRANSISTOR DTC114ES			
Q806	8-729-900-80	TRANSISTOR DTC114ES			
Q807	8-729-900-61	TRANSISTOR DTA114ES			
Q808	8-729-900-61	TRANSISTOR DTA114ES			
		< RESISTOR >			
R811-816					
	1-249-417-11	CARBON	1K	5%	1/4W
R817	1-249-419-11	CARBON	1.5K	5%	1/4W
R818	1-249-423-11	CARBON	3.3K	5%	1/4W
R819	1-249-425-11	CARBON	4.7K	5%	1/4W
R820	1-249-429-11	CARBON	10K	5%	1/4W
R821	1-249-435-11	CARBON	33K	5%	1/4W
R822	1-249-409-11	CARBON	220	5%	1/4W
R823	1-249-409-11	CARBON	220	5%	1/4W

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* A-2006-561-A RF AMP BOARD, COMPLETE

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Ref. No.	Part No.	Description			Remark
		< CAPACITOR >			
C1	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C2	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C3	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C4	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C5	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C6	1-162-637-11	CERAMIC CHIP	0.47uF		16V
C7	1-164-299-11	CERAMIC CHIP	0.22uF	10%	25V
C8	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C9	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C10	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C11	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C12	1-162-638-11	CERAMIC CHIP	1uF		16V
C13	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C14	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C15	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C16	1-164-299-11	CERAMIC CHIP	0.22uF	10%	25V
C17	1-162-637-11	CERAMIC CHIP	0.47uF		16V
C18	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C19	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C20	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C21	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C22	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C23	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C24	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C25	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C26	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C27	1-164-337-11	CERAMIC CHIP	2.2uF		16V
C28	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
		< CONNECTOR >			
CN1	1-569-349-11	CONNECTOR, F.P.C 6P			
* CN2	1-566-194-11	PIN, CONNECTOR (PC BOARD) 15P			
		< IC >			
IC1	8-752-039-01	IC CXA1364R			
		< COIL >			
L1	1-408-781-00	INDUCTOR CHIP	22uH		
L2	1-408-781-00	INDUCTOR CHIP	22uH		
L3	1-408-777-00	INDUCTOR CHIP	10uH		
L4	1-408-789-21	INDUCTOR CHIP	100uH		
		< TRANSISTOR >			
Q1	8-729-903-82	TRANSISTOR FMW2			
Q2	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q3	8-729-903-82	TRANSISTOR FMW2			
Q4	8-729-903-82	TRANSISTOR FMW2			
Q5	8-729-903-82	TRANSISTOR FMW2			
		< RESISTOR >			
R1	1-216-025-00	METAL GLAZE	100	5%	1/10W
R2	1-216-073-00	METAL CHIP	10K	5%	1/10W
R3	1-216-076-00	METAL CHIP	13K	5%	1/10W
R4	1-216-076-00	METAL CHIP	13K	5%	1/10W
R5	1-216-096-00	METAL GLAZE	91K	5%	1/10W
R6	1-216-096-00	METAL GLAZE	91K	5%	1/10W
R7	1-216-066-00	METAL CHIP	5.1K	5%	1/10W
R8	1-216-066-00	METAL CHIP	5.1K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R9-11					
	1-216-077-00	METAL CHIP	15K	5% 1/10W	
R12	1-216-079-00	METAL CHIP	18K	5% 1/10W	
R13	1-216-075-00	METAL CHIP	12K	5% 1/10W	
R14	1-216-079-00	METAL CHIP	18K	5% 1/10W	
R15-17					
	1-216-077-00	METAL CHIP	15K	5% 1/10W	
R18	1-216-044-00	METAL CHIP	620	5% 1/10W	
R19	1-216-083-00	METAL CHIP	27K	5% 1/10W	
R20	1-216-078-00	METAL GLAZE	16K	5% 1/10W	
R21	1-216-069-00	METAL CHIP	6.8K	5% 1/10W	
R22	1-216-096-00	METAL GLAZE	91K	5% 1/10W	
R23	1-216-078-00	METAL GLAZE	16K	5% 1/10W	
R24	1-216-083-00	METAL CHIP	27K	5% 1/10W	
		< VARIABLE RESISTOR >			
RV1	1-238-181-11	RES, ADJ, CERMET 4.7K			
RV2	1-238-181-11	RES, ADJ, CERMET 4.7K			
RV3	1-238-238-11	RES, ADJ, CERMET 22K			
RV4	1-238-238-11	RES, ADJ, CERMET 22K			
**********					
*	1-654-392-11	S-END BOARD			
		**********			
		< PHOTO SENSOR >			
Q950	1-808-957-11	PHOTO SENSOR			
**********					
*	1-655-918-11	SBM SW BOARD			
		**********			
		< CAPACITOR >			
C705	1-136-165-00	FILM	0.1uF	5% 50V	
		< CONNECTOR >			
CN703	1-691-760-51	PIN, CONNECTOR 5P			
		< IC >			
IC703	8-749-922-36	IC GP1U50XB			
		< RESISTOR >			
R722	1-249-435-11	CARBON	33K	5% 1/4W	
		< SWITCH >			
S715	1-571-520-11	SWITCH, SLIDE (REMOTE)			
S745	1-570-974-11	SWITCH, SLIDE (SBM)			
**********					

Ref. No.	Part No.	Description			Remark
*	A-2007-471-A	SP BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C820	1-124-442-00	ELECT	330uF	20% 6.3V	
C821	1-164-159-11	CERAMIC	0.1uF	50V	
C822	1-164-159-11	CERAMIC	0.1uF	50V	
C823	1-124-442-00	ELECT	330uF	20% 6.3V	
C824-826					
	1-162-294-31	CERAMIC	0.001uF	10% 50V	
C827	1-164-159-11	CERAMIC	0.1uF	50V	
C828	1-164-159-11	CERAMIC	0.1uF	50V	
		< CONNECTOR >			
CN802	1-691-465-11	PIN, CONNECTOR (PC BOARD) 9P			
CN803	1-573-105-11	CONNECTOR, PC BOARD 4P			
* CN804	1-695-808-11	CONNECTOR, PC BOARD 8P			
* CN805	1-695-808-11	CONNECTOR, PC BOARD 8P			
		< IC >			
IC803	8-752-355-55	IC CXD2605Q			
IC804	8-752-337-79	IC CXK58257AM-10LL			
IC805	8-759-916-12	IC SN74HC00AN			
		< COIL >			
L801	1-410-509-11	INDUCTOR	10uH		
L802	1-410-509-11	INDUCTOR	10uH		
		< TRANSISTOR >			
Q810	8-729-620-05	TRANSISTOR 2SC2603-EF			
		< RESISTOR >			
R825	1-249-425-11	CARBON	4.7K	5% 1/4W	
R826	1-249-425-11	CARBON	4.7K	5% 1/4W	
R827	1-249-413-11	CARBON	470	5% 1/4W	
R828	1-249-433-11	CARBON	22K	5% 1/4W	
R829	1-249-433-11	CARBON	22K	5% 1/4W	
R830	1-249-441-11	CARBON	100K	5% 1/4W	
R831	1-249-409-11	CARBON	220	5% 1/4W	
R832	1-247-807-31	CARBON	100	5% 1/4W	
R833	1-249-413-11	CARBON	470	5% 1/4W	
R834	1-249-413-11	CARBON	470	5% 1/4W	
R835	1-249-409-11	CARBON	220	5% 1/4W	
**********					

SW (IN) **SW (OUT)** **T-END**

Ref. No.	Part No.	Description	Remark
*	1-655-914-11	SW (IN) BOARD	
		**********	
		< SWITCH >	
S11	1-572-247-11	SWITCH, SLIDE (CASSETTE COMPARTMENT LOCK)	
**********			
*	1-655-915-11	SW (OUT) BOARD	
		**********	
		< SWITCH >	
S12	1-570-975-11	SWITCH, SLIDE (CASSETTE COMPARTMENT OUT)	
**********			
*	1-654-391-11	T-END BOARD	
		**********	
		< PHOTO SENSOR >	
Q951	1-808-957-11	PHOTO SENSOR	
**********			
		MISCELLANEOUS	
		**********	
17	1-769-542-11	WIRE (FLAT TYPE) (31 CORE)	
66	1-769-541-11	WIRE (FLAT TYPE) (17 CORE)	
82	1-775-048-11	CORD (WITH CONNECTOR)	
⚠F501	1-532-286-00	FUSE (T2.5A/250V) (AEP, UK, G)	
⚠F501	1-576-105-11	FUSE (2.5A/250V) (US, Canadian)	
⚠F502	1-532-286-00	FUSE (T2.5A/250V) (AEP, UK, G)	
⚠F502	1-576-105-11	FUSE (2.5A/250V) (US, Canadian)	
M1	A-2003-660-A	MOTOR ASSY (CASSETTE COMPARTMENT)	
M901	A-2004-301-A	MOTOR ASSY, CONTROL	
M902	8-835-306-01	MOTOR, DC U-17A (CAPSTAN)	
* M903	8-835-205-01	MOTOR, DC U-2A (REEL) (INCLUDING PM901)	
M904	8-848-549-11	DRUM ASSY DOU-15A	
PM902	1-454-522-11	SOLENOID, PLUNGER	
⚠T901	1-427-912-11	TRANSFORMER, POWER (US, Canadian)	
⚠T901	1-427-913-11	TRANSFORMER, POWER (AEP, UK, G)	
**********			

Ref. No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-473-087-11	REMOTE COMMANDER (RM-D868)	
⚠	1-551-812-11	CORD, POWER (US, Canadian)	
⚠	1-590-910-11	CORD SET, POWER (AEP, UK, G)	
	2-297-913-00	WASHER (DIA.5), ORNAMENTAL	
*	3-384-415-01	CUSHION	
	3-798-609-12	MANUAL, INSTRUCTION (ENGLISH, FRENCH, GERMAN)	
	3-920-800-12	RACK (L/R)	
*	3-925-043-11	PLATE, ORNAMENTAL	
*	3-931-028-01	INDIVIDUAL CARTON	
	4-962-615-01	COVER, BATTERY (For RM-D868)	
	7-682-276-04	SCREW +RK 5X12	
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
**********			
		**********	
		HARDWARE LIST	
		**********	
#1	7-621-772-08	SCREW +B 2X3	
#2	7-621-772-20	SCREW +B 2X5	
#3	7-621-772-30	SCREW +B 2X6	
#4	7-621-773-86	SCREW +B 2.6X4	
#5	7-621-775-08	SCREW +B 2.6X3	
#6	7-627-552-47	SCREW, PRECISION +P 1.7X4	
#7	7-627-553-27	SCREW, PRECISION +P 2X2.5	
#8	7-685-871-01	SCREW +BVTT 3X6 (S)	
#9	7-627-553-67	SCREW, PRECISION +P 2X5	
#10	7-627-852-48	PRECISION SCREW +P1.7X3.5 TYPE3	
#11	7-628-253-00	SCREW +PS 2X4	
#12	7-682-660-09	SCREW +PS 4X6	
#13	7-621-255-45	SCREW +P 2X6	
#14	7-621-772-00	SCREW +B 2X3	
#15	7-621-772-10	SCREW +B 2X4	
#16	7-682-545-09	SCREW +B 3X4	
#17	7-685-660-29	SCREW +BVTP 4X10 TYPE2 SLIT	
#18	7-685-133-19	SCREW +BTP 2.6X6 TYPE2 N-S	
#19	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
#20	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
#21	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#22	7-682-548-04	SCREW +BVTT 3X8 (S)	
#23	7-685-645-79	SCREW +BVTP 3X6 TYPE2 SLIT	

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

9-960-444-11

Sony Corporation
Consumer A & V Products Company
Home A & V Products Div.

English
95K04099-1
Printed in Japan
© 1995. 11
Published by Home A & V Products Div.
Quality Engineering Dept.